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and Aquatic
Sciences

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Fisheries Research Board
of Canada*)

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des sciences
halieutiques
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(Anciennement le *Journal de l'office
des recherches sur les pêcheries
du Canada*)

Volume 37, Index 1980



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Fisheries and Oceans

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Canadian Journal of Fisheries and Aquatic Sciences

Journal canadien des sciences halieutiques et aquatiques

Volume 37, Index 1980

INDEX TO PUBLICATIONS FOR 1980¹

In 1968 the Fisheries Research Board of Canada published Bulletin 164, a subject-author index and list of publications to 1964. Miscellaneous Special Publication 18, covering the period 1965-72, was published in 1973. Since 1973 an annual subject-author index has been published as a separate issue of the *Journal*. The index also contained a list of all articles, in all series of publications.

The 1980 index contains a subject index, author index and list of publications. All entries in the subject index are made up of an entry term plus a number of modifying terms (not exceeding three), plus a taxonomic name (omitted where the taxon is the entry term), or common name (omitted where the common name is the entry term), and a geographic entry (also omitted where the geographic area is the entry term). The entry term and modifying terms are selected from the controlled vocabulary wherever possible (*Thesaurus of Terms for Aquatic Sciences and Fisheries*, FAO Fish. Circ. 344 and supplement), but in some cases it is necessary to use "free terms" (i.e. uncontrolled terms of not more than 50 characters) to adequately convey the subject concept. It is possible for these free terms to appear in any modifying position but never as entry terms.

¹Prepared under contract by the Huntsman Marine Laboratory.

Printed in Canada

INDEX DES PUBLICATIONS POUR 1980¹

En 1968, l'Office des recherches sur les pêcheries du Canada publiait de Bulletin n° 164 qui constituait un index des matières et des auteurs, ainsi qu'une liste des Publications, antérieures à 1965. Le n° 18 des Publications, diverses spéciales, visant la période de 1965 à 1972, a paru en 1973. Depuis 1973, on publie annuellement un index des matières et des auteurs comme numéro distinct du *Journal*. Cet index comprend aussi une énumération des articles ayant paru dans toutes les séries de publications.

L'index pour 1980 comprend un répertoire des matières et des auteurs et une liste des publications. Toutes les notices de l'index des matières sont composées d'un terme d'entrée et d'au plus trois termes modificatifs, ainsi que d'une désignation taxonomique (sauf si celle-ci constitue le terme d'entrée), ou d'une appellation courante (sauf si celle-ci est le terme d'entrée) et d'une inscription géographique (omise si la région géographique est le terme d'entrée). Dans la mesure du possible, le terme d'entrée et les termes modificatifs sont choisis suivant le vocabulaire contrôlé (*Thesaurus of Terms for Aquatic Sciences and Fisheries*, FAO Fish. Circ. 344 et supplément), mais dans certains cas il est nécessaire d'employer des "termes libres" (termes non contrôlés de 50 caractères ou moins) pour exprimer convenablement le sujet traité. Les termes libres peuvent servir de termes modificatifs mais jamais de termes d'entrée.

¹Etabli à forfait par le Laboratoire Huntsman des sciences marines.

Imprimé au Canada

ABBREVIATIONS USED IN INDEX

(The designation (F) in the index indicates the article referred to was published in French, and (R) indicates the article was reprinted in 1980.)

- J - Canadian Journal of Fisheries and Aquatic Sciences
- SP - Special Publication
- B - Bulletin
- T - Technical Report
- M - Manuscript Report
- D - Data Report
- I - Industry Report
- S - Studies
- CA - Annual Report Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC)
- CAD - Advisory Document Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC)
- CRD - Research Document Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC)
- OD - Ocean Dumping Report

The Provinces and Territories of Canada are abbreviated to:

Alta.	(Alberta)	N.W.T.	(Northwest Territories)
B.C.	(British Columbia)	Ont.	(Ontario)
Man.	(Manitoba)	P.E.I.	(Prince Edward Island)
N.B.	(New Brunswick)	Que.	(Quebec)
Nfld.	(Newfoundland)	Sask.	(Saskatchewan)
N.S.	(Nova Scotia)	Y.T.	(Yukon Territory)

Certain geographical areas (particularly oceans) have their major subdivisions designated by N(north), S(south), E(east), W(west), NW(northwest), etc., also Atl.(Atlantic), Pac.(Pacific).

Certain international commissions are commonly referred to as: ICNAF(International Commission for the Northwest Atlantic Fisheries), NAFO(Northwest Atlantic Fisheries Organization), INPFC(International North Pacific Fisheries Commission).

Scientific names, common names, and their spellings for the Canadian and American marine fishes taken within 200-m depth and for freshwater fishes are indexed according to the nomenclature recommended in *A List of Common and Scientific Names of Fishes from the United States and Canada* (Third Edition, 1970), Special Publication No. 6 of the American Fisheries Society. Where authors have used names or spellings not conforming to those recommended, index headings for such names are included, referring to the recommended ones under which the subject entries will be found.

ABREVIATIONS EN USAGE DANS L'INDEX

(La désignation (F) dans l'index signifie que l'article dont il est question a été publié en français et la désignation (R) signifie que l'article a été réimprimé en 1980.)

- J - Journal canadien des sciences halieutiques et aquatiques
- SP - Publication spéciale
- B - Bulletin
- T - Rapport technique
- M - Rapport manuscrit
- D - Rapport statistique
- I - Rapport à l'industrie
- S - Etudes
- CA - Rapport annuel comité scientifique consultatif des pêches canadiennes dans l'Atlantique (CSCPCA)
- CAD - Document consultatif comité scientifique consultatif des pêches canadiennes dans l'Atlantique (CSCPCA)
- CRD - Document de la recherche comité scientifique consultatif des pêches canadiennes dans l'Atlantique (CSCPCA)
- OD - Rapport immersion de déchets en mer

Les provinces et territoires du Canada sont abrégés comme suit:

Alta.	(Alberta)	N.W.T.	(Territoires du Nord-Ouest)
B.C.	(Colombie-Britannique)	Ont.	(Ontario)
Man.	(Manitoba)	P.E.I.	(Île-du-Prince-Édouard)
N.B.	(Nouveau-Brunswick)	Que.	(Québec)
Nfld.	(Terre-Neuve)	Sask.	(Saskatchewan)
N.S.	(Nouvelle-Écosse)	Y.T.	(Territoire du Yukon)

Certaines régions géographiques (surtout les océans) ont leur principales subdivisions indiquées de la façon suivante: N(nord), S(sud), E(est), W(ouest), NW(nord-ouest), ainsi que Atl.(Atlantique), Pac.(Pacifique).

On désigne communément certaines commissions internationales de la façon suivante: ICNAF (Commission internationale des pêcheries de l'Atlantique nord-ouest), NAFO (l'Organisation des pêches de l'Atlantique nord-ouest), INPPC (Commission internationale des pêcheries du Pacifique nord).

Les désignations scientifiques, les noms communs et l'orthographe des poissons marins canadiens et américains, pris en deçà de 200 m de profondeur, ainsi que les poissons d'eau douce sont indexés conformément aux recommandations de l'ouvrage *A List of Common and Scientific Names of Fishes from the United States and Canada* (troisième édition, 1970), Publication spéciale n° 6 de l'American Fisheries Society. Quand un auteur utilise des désignations différentes des formes recommandées, on inclut des rubriques renvoyant à ces dernières, sous lesquelles on trouve les notices.

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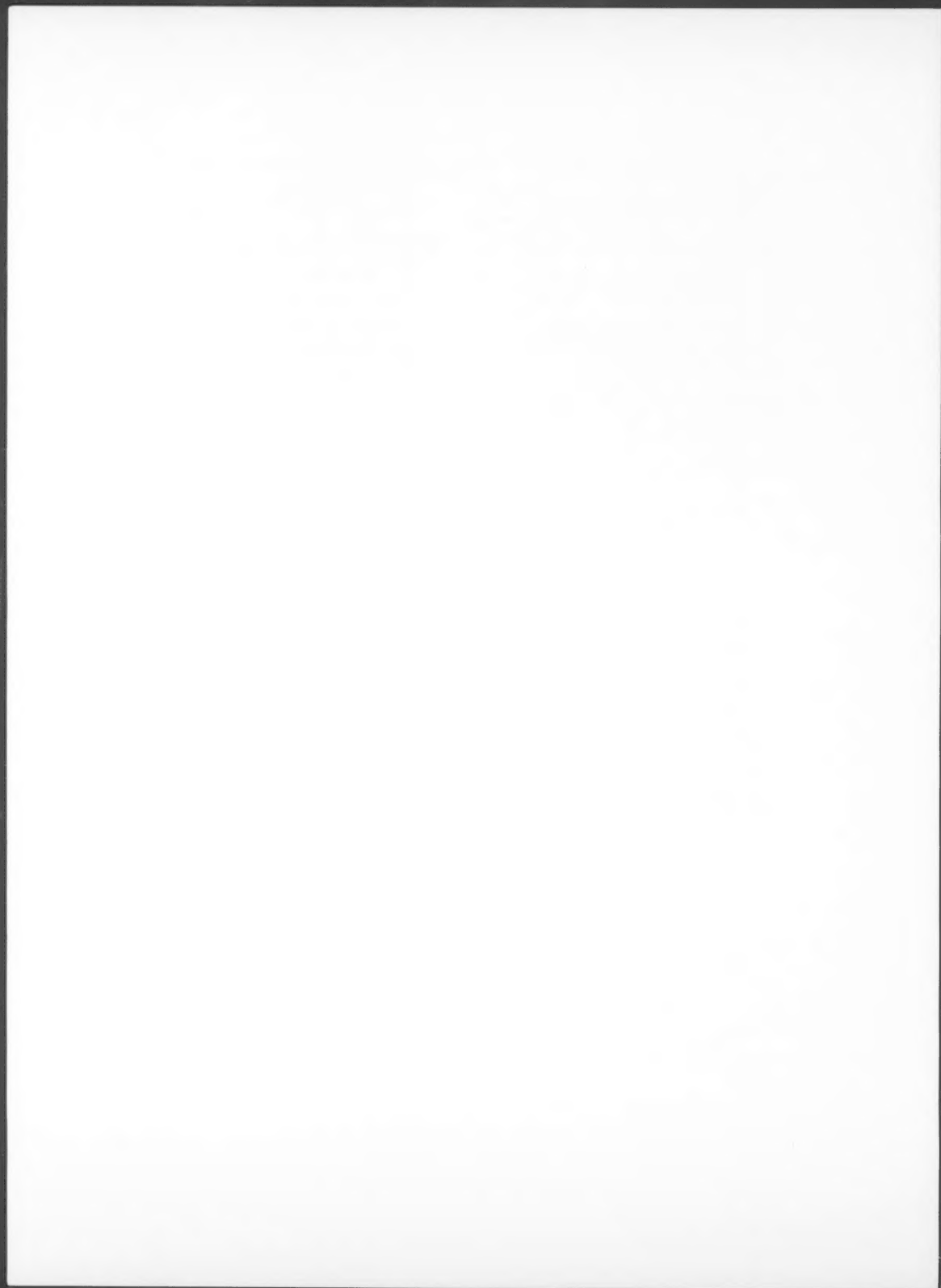
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T 920 (new records, identification keys, Bay of Fundy)
- Annual reports
CA (Canadian Atlantic Fisheries Scientific Advisory Committee 1977-78, NW Atl.)
- Anodonta cataractae* (see Clam, freshwater)
grandis (see Mussel, floater)
- Anoplopoma fimbria* (see Sablefish)
- Antennarius* sp. (see Frogfish)
- Anthias* sp? (Serranidae)
J 37(1) : 49 (new record, Scotian Shelf)
- Antibiotics
J 37(6) : 1038 (vancomycin, detection, human food, American lobster)
- Antibodies
J 37(4) : 719 (fluorescent antibody techniques, detection, *Corynebacterium salmoninus*)
- Apatites
J 37(4) : 640 (sediment analysis, Kamloops L., B.C.)
- Apogon pseudomaculatus* (see Cardinalfish, two-spot)
- Apparatus (see Equipment)
- Aquaculture; Aquaculture techniques (see also Fish culture; Shellfish culture)
M 1562 (gravel incubation, habitat improvement, chum salmon, Inches Creek, Fraser R. system, B.C.)
S 2687 (enhancement, Atlantic salmon, Nfld.)
- Aquatic insects (see also names of families; also orders)
J 37(4) : 647 (heavy metals, pollution effects, indicator species, Chironomidae, Ohio)
(4) : 742 (carbon, food webs, Findley L., Wash.)
- Aquatic mammals (see also names of species)
M 1552 (population characteristics, Baffin I., N.W.T.)
S 2695 (paleontology, phylogeny, NE Pac.)
- Aquatic plants
J 37(11) : 1895 (environmental effects, lamprey control, Great Lakes)
M 1534 (spawning grounds, charts, aerial photography, Pacific herring, Stuart Channel, Strait of Georgia, B.C.)
1536 (spawning grounds, charts, aerial photography, Pacific herring, Clayoquot Sound, B.C.)
1549 (spawning grounds, charts, aerial photography, Pacific herring, Barkley Sound, B.C.)
1579 (spawning grounds, charts, aerial photography, Pacific herring, Thompson Bay, B.C.)
1580 (spawning grounds, charts, aerial photography, Pacific herring,

- Laredo Sound, B.C.)
S 2732 (pollution monitoring, terbutryn, degradation)
- Arctic
J 37(4) : 589 (nutrients, geographical distribution, water masses, Canadian Archipelago)
- B 207 (check lists, biogeography, bivalve molluscs, central, eastern Canada)
- 208 (taxonomy, geographical distribution, life history, snailfishes, Canada)
- T 935 (taxonomy, ecology, literature reviews, Arctic char, W Arctic)
- S 2733 (drag coefficient, sea ice, anemometers)
- Argid, northern (*Argis lar*)
B 202 (new records, NE Pac.)
- Argid, split-eye (*Argis ovifer*)
B 202 (new records, NW Pac.)
- Argis lar (see Argid, northern)
ovifer (see Argid, split-eye)
- Argopecten gibbosus* (see Scallop, deepwater calico)
- Aristichthys nobilis* (see Carp, bighead)
- Aromatics (see Hydrocarbons; see also Pollutants; Pollution; Pollution effects)
- Arsenic; Arsenic compounds
J 37(3) : 415 (microbial degradation, algal blooms, Experimental Lakes Area, NW Ont.)
- Artificial substrata
S 2686 (polyethylene film, seed collection, sea scallop, Nfld.)
- Atheresthes stomias* (see Flounder, arrowtooth)
- Atlantic Ocean (see Northwest Atlantic Ocean; also North Atlantic Ocean)
- ATP
J 37(4) : 600 (gills, growth, photoperiodicity, chinook salmon)
- S 2660 (nutrients, growth, *Scenedesmus quadricauda*)
- 2670 (growth, phytoplankton, Sargasso Sea)
- B
- Babine Lake, B.C.
J 37(2) : 203 (temperature effects, food conversion, growth, sockeye salmon)
- Bacillariophyceae (see Diatoms)
- Bacteria
J 37(4) : 719 (detection, fluorescent antibody techniques, *Corynebacterium salmoninus*)
- (4) : 746 (experimental research, standardization, *Aeromonas salmonicida*)
- (6) : 1040 (flexibacteria, biochemical analysis, freshwater fishes, *Flexibacter columnaris*)
- (10) : 1499 (gill disease, microbiological culture, salmonids)
- (10) : 1505 (bacterial diseases, fin rot, microbiological culture, Atlantic salmon)
- (12) : 2236 (serological studies, hatcheries, *Aeromonas salmonicida*, N.S.)
- D 204 (pollution monitoring, Atlantic oyster, Maritime Provinces 1979)
- S 2690 (gaftkemia, *Aerococcus viridans*, American lobster)
- 2725 (biosynthesis, polysaccharides, *Aeromonas hydrophila*)
- Bacterial diseases (see Diseases; Disease control)
- Baffin Island, N.W.T.
M 1552 (population characteristics, aquatic mammals)
- 1557 (biological surveys, environmental surveys, Brevoort Harbour)
- 1561 (breeding, habitat, behavior, ringed seal)
- 1573 (geographical distribution, feeding behavior, marine birds)
- Balaena mysticetus* (see Whale, bowhead)
- Balaenoptera borealis* (see Whale, sei)
physalus (see Whale, finback)
- Balanus glandula* (see Barnacle)
- Barnacle (*Balanus glandula*)
M 1535 (population dynamics, environmental effects, Squamish R. estuary, B.C.)
- Baseline studies
M 1538 (resident boating, recreation, Strait of Georgia, B.C.)
- Bass, largemouth (*Micropterus salmoides*)
J 37(2) : 225 (juveniles, mortality, winter)
- Bass, striped (*Morone saxatilis*) (*Roccus saxatilis*)
J 37(2) : 143 (environmental conditions, spawning behavior, year-class success, Potomac R. estuary, Md.)
- (11) : 1924 (predators, sea lamprey, NW Atl.)
- M 1566 (sport fishing statistics, biological surveys, stock assessment, Annapolis R., N.S.)

Bay of... (see name of bay)

Bear, polar (*Ursus maritimus*)

- M 1561 (predation, ringed seal, Baffin I., N.W.T.)

Beaufort Sea

- T 859 (migrations, spring season, bowhead whale, white whale)
 D 198 (geographical distribution, population structure, reproduction, *Mesidotea* spp.)

Behavior (see also Feeding behavior; also Orientation behavior; also Spawning; Spawning behavior)

- J 37(10): 1550 (swimming, circadian rhythms, jellyfish)
 M 1561 (spring haul-out, ringed seal, Baffin I., N.W.T.)
 S 2696 (social behavior, whales)

Beluga (*Delphinapterus leucas*) (see Whale, white)*Bentheogennema borealis* (see Shrimp, northern blunt-tailed)
burkenroadi (see Shrimp, Burkenroad's blunt-tailed)

Benthos

- J 37(6): 957 (colonization, detritus, invertebrates, Otter Creek, Wis., East R., Col.)
 (6): 979 (ecology, invertebrates, Gulf of St. Lawrence, St. Lawrence R. estuary)
 (9): 1358 (ordination, reciprocal averaging, statistical analysis, macroinvertebrates)
 (10): 1514 (habitat, rivers, gravel, Oreg.)
 B 207 (check lists, biogeography, bivalve molluscs, Arctic, central, eastern Canada)
 T 951 (oxygen depletion, environmental effects, Howe Sound, B.C.)
 M 1568 (estuarine organisms, Amphipoda, Digdeguash R., N.B.)
 D 217 (oxygen depletion, environmental effects, Howe Sound, B.C.)

Bering Sea

- J 37(7): 1093 (population genetics, biochemistry, population structure, walleye pollock)
 (10): 1488 (sexual maturity, size distribution, computer programs, Alaska king crab, tanner crab)

Berryteuthis magister (see Squid, red)*Betapista* (Polychaeta)

- J 37(1): 20 (new genus, Terebellidae, NE Pac.)

Betapista dekkeri

- J 37(1): 20 (new species, Terebellidae, NE Pac.)

Bibliographies

- SP 45 (sea ice, ice navigation, Canada coasts, Northern Hemisphere oceans) (toxicity tests, methodology, aquatic organisms)
 T 911 (limnology, inland fisheries, Canada)
 919 (Atlantic herring, NW Atl.)
 938 (fisheries Y.T.)
 950 (ambient pH, environmental effects, freshwater fishes, World Inland Waters)
 OD 2 (annotated, ocean dumping, research programs)

Big Qualicum River, Vancouver Island, B.C.

- M 1528 (fish culture, escapement, Pacific salmon)

Bioaccumulation

- J 37(4): 632 (diflubenzuron, food, brown bullhead, black crappie)
 (4): 738 (benzene, carbon 14, *Brachionus plicatilis*)
 (10): 1573 (heavy metals, northern pike, white sucker, lakes, Flin Flon, Man.)
 (12): 2318 (aromatics, food chains, northern quahog)
 D 195 (mercury, walleye, northern pike, lake whitefish, Churchill-Rat-Burntwood, Nelson R. systems, Man.)
 S 2691 (aromatics, measuring, Atlantic salmon)
 2703 (chemical compounds, Atlantic salmon)
 2704 (pesticides, blue mussel)
 2734 (polychlorinated biphenyls, sediments, sandworm, sand shrimp, Passamaquoddy Bay, N.B.)

Bioacoustics

- J 37(4): 693 (population density, euphausiids, Gulf of St. Lawrence)
 (12): 2358 (standardization, size distribution, sperm whale, NW Atl.)

Bioassays (see also Toxicants; Toxicity; Toxicity tests)

- J 37(2): 163 (enzymes, serum, liver, rainbow trout)

Biochemical analysis

- J 37(2): 195 (biochemical composition, fatty acids, lipids, green sea urchin, N.S.)
 (6): 1040 (flexibacteria, freshwater fishes, *Flexibacter columnaris*)
 (11): 1665 (blood, larvae, lampreys, World Waters)
 T 902 (quality assurance, methodology, short-finned squid, Canada)

- D 214 (biochemical composition, zooplankton, marine crustaceans, Frobisher Bay)
- S 2716 (agar, quality, *Gracilaria* spp.)
- Biochemistry**
- J 37(3) : 1093 (population genetics, population structure, walleye pollock, Bering Sea, Gulf of Alaska)
- (7) : 1149 (phenotypic variations, isozymes, electrophoresis)
- Biodegradation**
- J 37(1) : 123 (leaves, alder, Colorado R., Col.)
- (3) : 415 (microbial degradation, organic matter, arsenic, Experimental Lakes Area, NW Ont.)
- Bioenergetics**
- J 37(6) : 1012 (population dynamics, recruitment)
- (7) : 1086 (swimming speeds, mathematical models, fishes)
- (8) : 1254 (dynamics, food conversion, *Chironomus plumosus*, Bay of Quinte, L. Ontario)
- (11) : 2159 (mathematical models, growth, food consumption, sea lamprey, Great Lakes)
- T 958 (seasonal variations, Atlantic herring, Nfld.)
- D 214 (zooplankton, marine crustaceans, Frobisher Bay)
- Biogeography**
- J 37(11) : 1595 (lampreys, World Waters)
- (12) : 2352 (relict species, colonization, Dolly Varden, Y.T.)
- B 207 (bivalve molluscs, Arctic, central, eastern Canada)
- 208 (geographical distribution, taxonomy, life history, snailfishes, arctic Canada)
- Biological surveys**
- M 1557 (marine organisms, Brevoort Harbour, Baffin I., N.W.T.)
- 1566 (stock assessment, striped bass, Annapolis R., N.S.)
- S 2709 (grey seal, Norway)
- 2710 (population number, harbor seal, grey seal, Norway)
- Biometrics**
- J 37(2) : 283 (beaks, sex determination, short-finned squid, Nfld.)
- CRD 80/7 (morphometrics, Arctic cod, Labrador, Nfld.)
- Biosynthesis**
- S 2725 (production, utilization, polysaccharides, *Aeromonas hydrophila*)
- Blackcod (*Anoplopoma fimbria*) (see Sablefish)**
- Blood**
- J 37(5) : 805 (physiology, stress, rainbow trout)
- (11) : 1665 (chemical composition, larvae, lampreys, World Waters)
- Bluegill (*Lepomis macrochirus*)**
- J 37(8) : 1216 (anaerobiosis, metabolism, oxygen)
- (12) : 2294 (selective feeding, predation, prey vulnerability)
- Boating**
- M 1538 (resident boating, recreation, baseline studies, Strait of Georgia, B.C.)
- Body size**
- T 929 (shrinkage, fixation, larvae, Atlantic cod)
- 944 (population structure, chinook salmon, NE Pac.)
- CRD 80/6 (otolith size, Arctic cod, Labrador, Nfld.)
- Boreogadus saida (see Cod, Arctic)**
- Bosmina (see Zooplankton)**
- Bothus sp. (Bothidae)**
- J 37(1) : 49 (rare records, Scotian Shelf)
- Brachionus (see Rotifera)**
- Brain**
- J 37(11) : 1680 (evolution, lampreys)
- (11) : 1723 (neurophysiology, lampreys)
- Branta canadensis interior (see Goose, Canada)**
- Brassica spp. (see Rapeseed)**
- Breeding (see also Fish culture)**
- M 1561 (habitat, ringed seal, Baffin I., N.W.T.)
- 1577 (habitat, ringed seal, Bridport Inlet, Melville I., N.W.T.)
- S 2709 (grey seal, Norway)
- British Columbia (Province), Canada (see also Babine Lake; Big Qualicum River; Fraser River; Fraser River Estuary; Fraser River System; Georgia, Strait of; Howe Sound; Queen Charlotte Islands; Queen Charlotte Sound; Queen Charlotte Strait; Vancouver Island)**
- J 37(4) : 561 (fishery management, Indians, predators, Pacific salmon)
- (4) : 640 (apartites, sediment analysis, Kamloops L.)
- (9) : 1398 (water circulation, Knight Inlet)
- (10) : 1476 (geographical distribution, coastal zone, phytoplankton, zooplankton)
- (10) : 1495 (otoliths, growth, fry, sockeye salmon)

- (11): 1906 (life history, adults, river lamprey, Pacific lamprey, Pac. coast)
- B 204 (taxonomy, geographical distribution, Hydromedusae)
- T 893 (catch statistics, yield predictions, escapement, pink salmon, Johnstone Strait)
- 894 (spawning grounds, eggs, stock assessment, Pacific herring)
- 896 (spawning, eggs, stock assessment, Pacific herring, French Creek, Qualicum Herring Sections)
- 899 (induced breeding, ovulation, coho salmon, Robertson Creek Salmon Hatchery)
- 909 (pulpmill effluents, pollution effects, quantitative distribution, Amphipoda, Isopoda, Port Mellon)
- 910 (pulpmill effluents, pollution effects, quantitative distribution, Amphipoda, Isopoda, Neroutsos Inlet)
- 921 (processing, preservation, roe, Pacific herring)
- 923 (resource development, sociological aspects, fishery economics, Pacific salmon)
- 924 (lakes, fertilization, nursery grounds, sockeye salmon)
- 942 (fishery development, potential resources, commercial species, squids)
- 947 (fishing effort, production, stock assessment, abalone)
- 957 (zooplankton, check lists, biomass, sockeye salmon)
- 959 (stock assessment, population dynamics, Pacific herring)
- 960 (stock assessment, population dynamics, Pacific herring, Barkley Sound)
- M 1529 (fishery resources, life history, environmental conditions, chinook salmon, McGregor R.)
- 1533 (standardization, coding, geographic units, Pacific herring)
- 1535 (population dynamics, environmental effects, barnacle, Squamish R. estuary)
- 1536 (spawning grounds, charts, aquatic plants, Pacific herring, Clayoquot Sound)
- 1542 (fish culture, incubation, escapement, chum salmon, Blaney Creek)
- 1543 (fish culture, spawning, biological data, chum salmon, Lower Bella Coola Valley)
- 1545 (spawning, stock assessment, Pacific herring, Chatham Sound)
- 1547 (spawning, stock assessment, Pacific herring, Clayoquot Sound)
- 1548 (experimental trap fishing, gear selectivity, octopus, Barkley Sound)
- 1549 (spawning grounds, charts, aquatic plants, Pacific herring, Barkley Sound)
- 1550 (stock assessment, yield predictions, roe, Pacific herring)
- 1565 (tagging, spawning migrations, Dover sole, Dixon Entrance)
- 1571 (habitat restoration, estuaries)
- 1572 (fishery surveys, echo surveys, stock assessment, walleye pollock, Dixon Entrance)
- 1574 (oceanographic data, physicochemical properties, Hecate Strait, Dixon Entrance)
- 1576 (fishery surveys, population density, population structure, abalone, Lotbinière Bay, Emily Carr Inlet)
- 1579 (spawning grounds, charts, aquatic plants, Pacific herring, Thompson Bay)
- 1580 (spawning grounds, charts, aquatic plants, Pacific herring, Laredo Sound)
- D 79 (habitat, spawning escapement, rivers, Pacific salmon, Prince George subdistrict)
- 80 (habitat, spawning escapement, rivers, Pacific salmon, Statistical Area 24, Clayoquot Sound)
- 160 (oceanographic data, environmental surveys)
- 161 (habitat, spawning escapement, rivers, Pacific salmon, Lillooet-Pemberton subdistrict)
- 162 (exploratory fishing, trap fishing, tagging, sablefish)
- 172 (oceanographic data, pollution monitoring, Quatsino Sound, Neroutsos Inlet)
- 173 (fishery surveys, biological data, quantitative distribution, walleye pollock, Dixon Entrance, Hecate Strait)
- 177 (population structure, length, age composition, rock sole, Butterworth-Warren Area, Hecate Strait)
- 179 (catch statistics, groundfish, stock assessment, Pacific cod, Hecate Strait)
- 183 (habitat, spawning escapement, rivers, Pacific salmon, Statistical Area 26, Kyuquot Sound)
- 187 (fishery surveys, oceanographic data, stock assessment, walleye pollock, Dixon Entrance)
- 190 (landing statistics, age composition, length, English sole, Hecate Strait)
- 191 (hydrographic surveys, fishery surveys, stock assessment, Pacific cod, Hecate Strait)
- 203 (habitat, spawning escapement, rivers, Pacific salmon, Chilliwack-Hope subdistrict)
- 210 (oceanographic data, environmental conditions, fishery surveys)
- 211 (habitat, spawning escapement, rivers, Pacific salmon, Cariboo subdistrict)
- I 109 (ponding, processing, quality control, Pacific herring, Alert Bay)

- 110 (catch statistics, roe, Pacific herring)
- 112 (human food, roe fishery, spawn, Pacific herring)
- 118 (spawning seasons, roe, fishery management, Pacific herring)
- S 2714 (metals, seasonal variations, *Nereocystis luetkeana*, Pac. coast)
- 2715 (non-metals, seasonal variations, *Nereocystis luetkeana*, Pac. coast)
- 2716 (biochemical composition, quality, agar, *Gracilaria* spp.)
- Brosme brosme* (see Cusk)
- Bullhead, brown (*Ictalurus nebulosus*)
- J 37(4) : 632 (diflubenzuron, bioaccumulation, food)
- (8) : 1216 (anaerobiosis, metabolism, oxygen)
- Buoyancy
- J 37(4) : 670 (limiting factors, seasonal variations, fathead minnow)
- Burbot (*Lota lota*)
- J 37(11) : 1974 (predators, European river lamprey, N Sweden)
- D 201 (catch/effort, experimental fishing, reservoirs, Southern Indian L., Man.)
- Buteo lagopus* (see Hawk, rough-legged)
- By catch
- M 1583 (catch statistics, fishery management, Atlantic salmon, N.S.)
- C
- Cadmium; Cadmium compounds
- J 37(3) : 403 (pollution effects, plankton, Experimental Lakes Area, NW Ont., L. Michigan)
- (10) : 1573 (bioaccumulation, northern pike, white sucker, lakes, Flin Flon, Man.)
- OD 3 (ocean dumping, legislation, literature reviews)
- Calcium
- J 37(2) : 219 (nutrient cycles, shells, floater mussel, Shell L., N.W.T.)
- (3) : 364 (pH effects, crayfish, Experimental Lakes Area, NW Ont.)
- Calibration
- S 2726 (electronic counters, zooplankton)
- California State, USA
- J 37(4) : 707 (molybdenum, nitrate uptake, photosynthesis, Castle L.)
- (7) : 1076 (logging, environmental impact, macroinvertebrates)
- (7) : 1130 (aquatic communities, interspecific relationships, submerged cages, Polychaeta)
- (12) : 2323 (recruitment, stable cycles, mathematical models, Dungeness crab)
- S 2659 (phytoplankton, variations, abundance, San Diego)
- Callionymus pauciradiatus* (see Dragonet, spotted)
- Calories
- S 2672 (seasonal variations, *Onisimus* (=Boeckosimus) *affinis*, Eskimo Lakes, N.W.T.)
- Canada (see also Frobisher Bay; Hudson Bay; James Bay; also Provinces; also Territories)
- J 37(2) : 185 (oxygen depletion, ice cover, freshwater lakes)
- (3) : 534 (aging methods, scale reading, fin-rays, lake whitefish)
- (8) : 1321 (sport fishing, fishery economics, evaluation)
- SP 45 (bibliographies, sea ice, ice navigation, coasts)
- 46 (directories, marine scientists, 1980)
- 51 (oceanographic equipment, catalogues)
- 52 (fishery resources, fishery economics, fishery management)
- B 205 (dams, water reservoirs, environmental effects)
- T 902 (quality assurance, methodology, biochemical analysis, short-finned squid)
- 911 (bibliographies, limnology, inland fisheries)
- M 1551 (manuals, information handling, reports, Department of Fisheries and Oceans)
- I 117 (fishery development, economics, potential resources, northern pink shrimp, NW Atl.)
- CRD 80/10 (fishing mortality, noncatch, Atlantic salmon)
- Cancer irroratus* (see Crab, rock (Atlantic))
- magister* (see Crab, Dungeness)
- Canso Strait, N.S.
- T 834 (environmental impact, causeways, pelagic fisheries, American lobster)
- Cape Breton, N.S.
- CRD 80/55 (biological assessment, catch/effort, population characteristics, snow crab)
- Capelin (*Mallotus villosus*)
- J 37(4) : 725 (meristic counts, statistical analysis, NW Atl.)
- T 905 (spawning, spawning grounds, Nfld., Labrador)
- S 2663 (alcohol, fish oils, food chains, Copepoda)
- Carbohydrates
- S 2667 (gas chromatography, methyl ethers)

- Carbon; Carbon compounds
 J 37(3) : 464 (gas exchange, photosynthesis, Experimental Lakes Area, NW Ont.)
 (4) : 742 (aquatic insects, food webs, Findley L., Wash.)
 D 200 (primary production, phytoplankton, Experimental Lakes Area, NW Ont.)
 S 2658 (distribution, Sargasso Sea)
- Carbon cycle
 J 37(3) : 454 (radioactive tracers, primary production, Experimental Lakes Area, NW Ont.)
- Carbon 14
 J 37(4) : 738 (benzene, *Brachionus plicatilis*)
- Carcinogens (see Toxicants; Toxicity; Toxicity tests)
- Cardinalfish, two-spot (*Apogon pseudomaculatus*)
 J 37(1) : 49 (new record, Scotian Shelf)
- Carp (*Cyprinus carpio*)
 T 948 (cryobiology, gametes, Thailand)
- Carp, bighead (*Aristichthys nobilis*)
 T 948 (cryobiology, gametes, Thailand)
- Carp, grass (*Ctenopharyngodon idella*)
 T 948 (cryobiology, gametes, Thailand)
- Carp, Indian (*Labeo rohita*)
 T 948 (cryobiology, gametes, Thailand)
- Catch/effort
 J 37(8) : 1229 (statistical analysis, Schaefer model)
 (8) : 1284 (analytical techniques, Schaefer model)
 (11) : 1967 (catch statistics, European river lamprey, rivers, Bothnian Bay, Finland)
 (11) : 2272 (mathematical models, standardization, stock assessment)
 (12) : 2346 (variance analysis)
 T 961 (groundfish fisheries, NE Pac.)
 D 188 (sport fishing statistics, angling, walleye, Hay R., N.W.T.)
 199 (sport fishing statistics, tagging, Arctic grayling, Kakisa R., N.W.T.)
 201 (experimental fishing, reservoirs, Southern Indian L., Man.)
 212 (sport fishing statistics, angling, Atlantic salmon, Nfld., Labrador)
 CRD 80/26 (stock assessment, production models, redfishes, ICNAF Div. 3Ø, NW Atl.)
 80/28 (stock assessment, production models, Atlantic cod, ICNAF Subdiv. 3Pn, Div. 4R, 4S, NW Atl.)
 80/29 (stock assessment, production models, Atlantic cod, ICNAF Subdiv. 3Ps, NW Atl.)
 80/36 (catch statistics, stock assessment, flatfishes, ICNAF Div. 4VWX, NW Atl.)
- 80/41 (landing statistics, stock assessment, American plaice, NAFO Div. 4T, NW Atl.)
 80/56 (landing statistics, long term changes, American lobster, NW Atl.)
 80/63 (stock assessment, production models, Atlantic cod, ICNAF Div. 2GH, NW Atl.)
- Catch statistics (see Fish catch statistics; Landing statistics; also Shellfish catch statistics; also Whaling; Whaling statistics)
- Catfish, channel (*Ictalurus punctatus*)
 J 37(5) : 871 (viruses, cell line, temperature effects)
- Catostomus catostomus (see Sucker, longnose)
commersoni (see Sucker, white)
- Cell culture
 J 37(5) : 871 (cell line growth, viruses, temperature effects, channel catfish)
 (7) : 1070 (cell line, tumors, isoenzymes, walleye)
 (7) : 1193 (cell size, phytoplankton, diatoms)
- Cephus grylle (see Guillemot, black)
- Ceratomyxa (see Pathogens)
- Cetacea (see also Dolphins; Porpoises; Whales; also names of species)
 S 2694 (progress reports, research programs, Canada coasts)
 2695 (paleontology, phylogeny, NE Pac.)
 2696 (fishery management, neuroanatomy, social behavior)
 2730 (stranding, ecological aspects, natural mortality)
- Chaoboridae
 S 2708 (synapomorphies, classification systems, taxonomy)
 2711 (classification systems, taxonomy)
- Char, Arctic (*Salvelinus alpinus*) (Arctic charr)
 T 935 (taxonomy, life history, literature reviews, W Arctic)
 D 184 (catch statistics, biological data, fishery management, Cambridge Bay, N.W.T.)
 S 2728 (literature reviews, population dynamics, life history)
- Charr, Arctic (see Char, Arctic)
- Chars (*Salvelinus* spp.) (Charrs) (see also names of species)
 S 2729 (isoenzymes, dehydrogenases, genetics)
- Charts
 M 1534 (aerial photography, aquatic plants,

- spawning grounds, Pacific herring, Stuart Channel, Strait of Georgia, B.C.)
 1536 (aerial photography, aquatic plants, spawning grounds, Pacific herring, Clayoquot Sound, B.C.)
 1549 (aerial photography, aquatic plants, spawning grounds, Pacific herring, Barkley Sound, B.C.)
 1579 (aerial photography, aquatic plants, spawning grounds, Pacific herring, Thompson Bay, B.C.)
 1580 (aerial photography, aquatic plants, spawning grounds, Pacific herring, Laredo Sound, B.C.)
- Check lists**
 J 37(11): 1595 (lampreys, World Waters)
 (11): 1616 (lampreys, Great Lakes)
 B 207 (bivalve molluscs, Arctic, central, eastern Canada)
 T 897 (zooplankton, Vancouver I., B.C.)
 917 (phytoplankton, L. Huron)
 957 (zooplankton, biomass, nursery grounds, sockeye salmon, B.C.)
 M 1510 (freshwater fishes, Great Bear R., N.W.T.)
 D 182 (zooplankton, Experimental Lakes Area, NW Ont.)
 215 (rockfishes, Queen Charlotte Is., B.C.)
 216 (rockfishes, Queen Charlotte Sound, B.C.)
- Chemical compounds**
 J 37(9): 1449 (geosmin 2-methylisoborneol, organoleptic properties, freshwater fishes, Cedar L., Man.)
 S 2703 (Dieldrin, mirex, bioaccumulation, excretion, Atlantic salmon)
- Chemical elements**
 M 1526 (dissolved, L. Winnipeg, Man.)
 S 2714 (metals, seasonal variations, *Nereocystis luetkeana*, B.C. coast)
 2715 (non-metals, seasonal variations, *Nereocystis luetkeana*, B.C. coast)
- Chemical extraction**
 J 37(4): 729 (chlorophylls, phytoplankton)
 (6): 1032 (spores, whirling disease)
 (9): 1426 (enzymes, zooplankton)
 S 2661 (micro extraction, organic compounds, chromatographic techniques)
- Chemical pollutants (see Pollutants; Pollution; Pollution effects)**
- Chemical species**
 J 37(3): 552 (sediment-water interface, Experimental Lakes Area, NW Ont.)
- Chilling storage (see Storage; Storage effects)**
- Chionoecetes bairdi* (see Crab, tanner)
opilio (see Crab, snow)
tanneri (see Crab, tanner)
- Chironomidae**
 J 37(4): 647 (indicator species, pollution effects, heavy metals, Ohio)
 (6): 927 (sampling, funnel traps, emergence, Southern Indian L., Man.)
 (8): 1254 (bioenergetics, dynamics, food conversion, *Chironomus plumosus*, Bay of Quinte, L. Ontario)
 B 206 (paleolimnology, environmental impact, long term changes, Bay of Quinte, L. Ontario)
 S 2678 (indicator species, water quality, holarctic region)
 2679 (phylogeny, morphology, female genitalia)
 2702 (taxonomy, female genitalia, *Habrobaenus hudsoni*, *Omisus pica*, *Polypedilum pardus*)
 2708 (synapomorphies, classification systems, taxonomy)
 2711 (classification systems, taxonomy)
- Chironomus* (see Chironomidae)
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 J 37(8): 1266 (cations, ion exchange, water analysis)
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 J 37(4): 729 (chemical extraction, phytoplankton)
 T 933 (isopleths, sampling, L. Ontario)
 D 200 (primary production, phytoplankton, Experimental Lakes Area, NW Ont.)
- Cholesterol**
 S 2657 (chromatographic techniques, fishery products)
- Chromatographic techniques**
 S 2657 (sterols, cholesterol, fishery products)
 2661 (gas chromatography, chemical extraction, organic compounds)
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 J 37(2): 286 (karyotypes, cytological techniques, *Neanthes arenaceodentata*)
 (8): 1225 (microbiological analysis, genetic toxicants, *Neanthes arenaceodentata*)
- Cisco (*Coregonus artedii*) (see Herring, lake)**
- Cisco, Arctic (*Coregonus autumnalis*)**
 M 1510 (fishery resources, Great Bear R., N.W.T.)
- Cisco, blackfin (*Coregonus nigripinnis*)**
 D 201 (catch/effort, experimental fishing, reservoirs, Southern Indian L., Man.)

- Cisco, shortjaw (*Coregonus zenithicus*)
 J 37(12): 2228 (polymorphism, population genetics, taxonomy, L. Superior)
- Ciscoes (*Coregonus* spp.)
 J 37(11): 2007 (predators, sea lamprey, Great Lakes)
- Citharichthys arctifrons* (see Flounder, Gulf Stream)
- Cladocera
 J 37(2): 211 (metals, ions, toxicity, *Daphnia magna*)
- Clam, freshwater (*Anodonta catartactae*)
 S 2705 (pesticides, lethal limits)
- Clams (see names of species)
- Clupea harengus harengus* (see Herring, Atlantic)
harengus pallasii (see Herring, Pacific) (*Clupea pallasii*)
- Cobia (*Rachycentron canadum*)
 J 37(1): 49 (new record, Scotian Shelf)
- Cod, Arctic (*Boreogadus saida*)
 CRD 80/4 (food, feeding behavior, Labrador, Nfld.)
 80/5 (age composition, growth, Labrador, Nfld.)
 80/6 (otolith size, body size, Labrador, Nfld.)
 80/7 (morphometrics, meristic counts, gonads, Labrador, Nfld.)
- Cod, Atlantic (*Gadus morhua*)
 J 37(10): 1467 (subpopulation, parasites, Nfld., NW Atl.)
 (12): 2276 (VEN)
 T 905 (spawning, spawning grounds, Nfld., Labrador)
 929 (aging methods, otoliths, fixation)
 CRD 80/16 (fishery surveys, stock assessment, catch statistics, ICNAF Subdiv. 4Vn, NW Atl.)
 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
 80/22 (stock assessment, population characteristics, catch statistics, ICNAF Div. 4T, 4Vn, NW Atl.)
 80/27 (stock assessment, catch statistics, population characteristics, ICNAF Div. 3Pn, 4RS, NW Atl.)
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- 80/38 (stock assessment, fishing vessel statistics, ICNAF Div. 4Vsw, NW Atl.)
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 80/46 (stock assessment, population dynamics, ICNAF Div. 4X, NW Atl.)
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- Cod, Pacific (*Gadus macrocephalus*)
 T 961 (catch/effort, catch statistics, NE Pac.)
 M 1563 (trawling, landing statistics, Strait of Georgia, B.C.)
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 (12): 2352 (biogeography, relict species, Dolly Varden, Y.T.)
- Colorado State, USA
 J 37(1): 123 (biodegradation, leaves, alder, Colorado R.)
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 J 37(10): 1488 (sexual maturity, size distribution, Alaska king crab, tanner crab, Bering Sea)
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 932 (stock assessment, population characteristics, fishery management, American lobster, NW Atl.)
 954 (interspecific relationships, green sea urchin, kelp, American lobster, St. Margaret's Bay, N.S.)

- 1571 (habitat restoration, estuaries, B.C.)
- Contaminants (see Pollutants; Pollution; Pollution effects)
- Copepoda
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(8) : 1295 (biological production, toxicity, metal interactions)
(10) : 1579 (reproduction, diapause, resting eggs, *Diaptomus leptopus*)
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- Copper; Copper compounds
J 37(10) : 1573 (bioaccumulation, northern pike, white sucker, lakes, Flin Flon, Man.)
- Coregonus artedii* (see Herring, lake) (cisco)
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- Corrections (Note: Of these references, only those referring to J 37 (but not the actual corrections) are shown after the affected entries under the subject heading in this index)
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(8) : 1333 (to J 36(12):1461, 1462; J 37(1):41; J 37(2):270,274,278,293)
- Corynebacterium salmonis*
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- Crab, Alaska king (*Paralithodes camtschatica*)
J 37(10) : 1488 (sexual maturity, size distribution, computer programs, Bering Sea)
- Crab, Dungeness (*Cancer magister*)
J 37(12) : 2323 (recruitment, stable cycles, mathematical models, Calif.)
- Crab, rock (Atlantic) (*Cancer irroratus*)
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- Crab, snow (*Chionoecetes opilio*)
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- Crab, tanner (*Chionoecetes bairdi*) (*C. tanneri*)
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- Crangon, bay (*Crangon franciscorum franciscorum*)
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- Crangon franciscorum franciscorum* (see Crangon, bay)
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- Crappie, black (*Pomoxis nigromaculatus*)
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- Crassostrea virginica* (see Oyster, Atlantic)
- Crayfish (*Orconectes virilis*)
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- Croaker, Atlantic (*Micropogonias undulatus*)
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191 (G. B. Reed groundfish cruise no. 79-6, Hecate Strait, Queen Charlotte Sound, B.C.)
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- Dactylopterus volitans* (see Gurnard, flying)
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- (4) : 589 (geographical, nutrients, water masses, Canadian Archipelago)
- (4) : 664 (phosphorus, bioassays, *Chlorella*, N.Z.)
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- (10) : 1476 (geographical, phytoplankton, zooplankton, coastal zone, B.C.)
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- (11) : 1811 (geographical, limiting factors, environmental conditions, sea lamprey, Great Lakes)
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- T 863 (geographical, population number, environmental effects, white whale, Mackenzie R. estuary)
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- M 1533 (coding, standardization, regions, Pacific herring, B.C.)
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- CAD (Advisory documents 1977-78, Canadian Atlantic Fisheries Scientific Advisory Committee, NW Atl.)
- Dogfish, smooth (*Mustelus canis*)
- J 37(1) : 49 (rare record, Chance Harbour, Bay of Fundy, N.B.)
- Dogfish, spiny (*Squalus acanthias*)
- T 961 (catch/effort, catch statistics, NE Pac.)
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- Dolly Varden (*Salvelinus malma*)
- J 37(12) : 2352 (biogeography, relict species, colonization, Y.T.)
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- J 37(4) : 712 (aging methods, dentin deposits, development)
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- J 37(1) : 49 (new record, Scotian Shelf)
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- J 37(12) : 2358 (size distribution, sperm whale, NW Atl.)
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- (7) : 1130 (aquatic communities, submerged cages, interspecific relationships, Polychaeta, Calif.)
- (9) : 1837 (mudflats, Windsor, N.S.)
- (11) : 1641 (larvae, metamorphosis, lampreys, Great Lakes)
- (11) : 1751 (feeding behavior, lampreys, sea lamprey)
- (11) : 1944 (lampreys, N Europe)
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- (12) : 2242 (seston, trophic structure, Hudson Bay)
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- J 37(7) : 1111 (fishery management, fishery economics, fishery regulations)

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- J 37(1) : 130 (river continuum concept, perspectives)
 (5) : 838 (selenium, mercury, Clay L., Ont.)
 (7) : 1076 (environmental impact, logging, Calif.)
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- J 37(1) : 49 (new record, Scotian Shelf)

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- J 37(3) : 552 (mathematical models, Experimental Lakes Area, NW Ont.)

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Eider, common (*Somateria mollissima*)

- M 1573 (geographical distribution, feeding behavior, Baffin I., N.W.T.)

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- M 1573 (geographical distribution, feeding behavior, Baffin I., N.W.T.)

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- J 37(5) : 775 (isozymes, population genetics, blue mussel, Maritime Provinces)
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 (7) : 1093 (biochemistry, population genetics, walleye pollock, Bering Sea, Gulf of Alaska)
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 (8) : 1236 (proteins, population genetics, stock identification, sockeye salmon, Cook Inlet, Alaska)
 (11) : 1630 (isoenzymes, population genetics, sea lamprey)

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- SP 49 (fish eggs, incubation, fish culture, sockeye salmon)

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- J 37(1) : 97 (simulation, mathematical models, *Brachionus rubens*)
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- SP 43 (teaching, manuals)

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- J 37(2) : 143 (year-class, striped bass, Potomac R. estuary, Md.)

- (2) : 225 (winter, mortality, metabolism, freshwater fishes)
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- J 37(1) : 123 (biodegradation, leaves, alder, Colorado R., Col.)
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 (9) : 1373 (production, hatcheries, stream flow, coho salmon, Puget Sound)
 (11) : 1886 (population control, fish kill, sea lamprey, Great Lakes)
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- J 37(6) : 937 (thermal pollution, zooplankton, Conowingo Pond, Pa.)
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 T 834 (causeways, pelagic fisheries, American lobster, Canso Strait, N.S.)
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Environmental legislation

- J 37(7) : 1196 (environmental protection,

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- (11): 2093 (chemical control, biological control, physical control, sea lamprey)
- Environmental surveys
- M 1557 (marine environment, Brevoort Harbour, Baffin I., N.W.T.)
- D 160 (oceanographic data, B.C.)
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- J 37(1): 116 (tissues, biological fatigue, rainbow trout)
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- (7): 1149 (phenotypic variations, statistical analysis, electrophoresis)
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- (10): 1531 (oxygen consumption, hypolimnion, primary production)
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- M 1528 (fish culture, Pacific salmon, Big Qualicum R., Vancouver I., B.C.)
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- D 79 (spawning, rivers, Pacific salmon, Prince George subdistrict, B.C.)
- 80 (spawning, rivers, Pacific salmon, Statistical Area 24, Clayoquot Sound, B.C.)
- 140 (spawning, rivers, Pacific salmon, Statistical Area 27, Cape Cook to Cape Scott, Vancouver I., B.C.)
- 161 (spawning, rivers, Pacific salmon, Lillooet-Pemberton subdistrict, B.C.)
- 167 (spawning, rivers, Pacific salmon, Statistical Areas 22, 23, Vancouver I., B.C.)
- 183 (spawning, rivers, Pacific salmon, Statistical Area 26, Kyuquot Sound, B.C.)
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- Eualid, striped (*Eualus herdmani*)
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- J 37(11): 1944 (ecology, lampreys, N Europe)
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- J 37(9): 1434 (oxygen depletion, thermodynamics, Man.)
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- J 37(11): 1680 (brain, pituitary gland, lampreys, Agnatha)

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- J 37(9) : 1352 (fecal pellets, settling rate, herbivores, zooplankton)
 (9) : 1421 (ammonia, mathematical models, brook trout, rainbow trout)
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- M 1548 (trap fishing, gear selectivity, octopus, Barkley Sound, B.C.)
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 (3) : 387 (biogeochemistry, trace elements, acidification)
 (3) : 403 (pollution effects, cadmium, plankton)
 (3) : 415 (arsenic, microbial degradation, algal blooms)
 (3) : 424 (phytoplankton culture, environmental effects)
 (3) : 434 (phytoplankton culture, hypolimnion, environmental effects)
 (3) : 442 (physiological indicators, nutrient deficiency, phytoplankton)
 (3) : 454 (carbon cycle, radioactive tracers, primary production)
 (3) : 464 (carbon, gas exchange, photosynthesis)
 (3) : 472 (orthophosphate, measuring, molybdenum)
 (3) : 479 (orthophosphate, seasonal variations, radiochemical analysis)
 (3) : 488 (nitrogen fixation, analytical techniques, phytoplankton)
 (3) : 494 (nitrogen fixation, phytoplankton)
 (3) : 506 (nitrogen cycle, denitrification, stratification)
 (3) : 513 (primary production, predictions, mathematical models)
 (3) : 523 (primary production, phytoplankton, emergence, Diptera)

- (3) : 534 (aging methods, scale reading, fin-rays, lake whitefish)
 (3) : 545 (interstitial water, diffusion coefficients)
 (3) : 552 (mathematical models, eddy diffusivity, chemical species)
 (8) : 1303 (water masses, age, iron cycle)
 (12) : 2355 (acidification, experimental data, teratogens, lake trout)
 M 1585 (acidification, pollution effects, phytoplankton)
 D 182 (check lists, population density, zooplankton)
 189 (light penetration, water transparency)
 200 (phytoplankton, primary production, carbon, chlorophylls)

Exploitation

- J 37(2) : 255 (growth, recruitment, lake whitefish, N.W.T.)
 (2) : 268 (mathematical models, yellowtail flounder, Pacific halibut, haddock)
 (11) : 2133 (population dynamics, lake trout, Great Lakes)
 CRD 80/12 (mortality, catch statistics, Atlantic salmon, Greenland, North America)

Exploratory fishing

- D 162 (trap fishing, sablefish, B.C.)
 193 (longlining, rockfishes, Queen Charlotte Is., B.C.)
 215 (catch statistics, stock assessment, rockfishes, Queen Charlotte Is., B.C.)
 216 (catch statistics, stock assessment, rockfishes, Queen Charlotte Sound, B.C.)
 218 (catch statistics, stock assessment, rockfishes, Queen Charlotte Is., B.C.)
 CRD 80/15 (resource availability, northern pink shrimp, striped pink shrimp, Ungava Bay, E Hudson Strait, ICNAF Div. 2G, NW Atl.)

F

Falco sparverius (see Kestrel, American)

Fallout

- S 2681 (metals, pollution monitoring, smelters, Flin Flon, Man.)

Families, new (see New families)

Fatigue (biological)

- J 37(1) : 116 (enzymes, tissues, rainbow trout)
 (5) : 765 (transplantation, survival, smolts, coho salmon)
 (5) : 805 (stocking organisms, fingerlings, rainbow trout)
 M 1565 (tagging, Floy tags, Dover sole, Dixon Entrance, B.C.)

Fats (see Lipids)

- Fatty acids**
 J 37(2) : 195 (biochemical composition, lipids, green sea urchin, N.S.)
 S 2707 (*Corophium volutator*, Minas Basin, Bay of Fundy)
- Pecundity**
 J 37(11) : 1635 (lampreys, Great Lakes)
 (11) : 1924 (anadromous species, sea lamprey, NW Atl.)
 CRD 80/17 (American lobster, Placentia Bay, Nfld.)
- Feeding behavior**
 J 37(1) : 1 (ecological associations, phytobenthos, *Eogammarus confervicolus*, Fraser R. estuary, B.C.)
 (1) : 120 (predation, Coelenterata, Strait of Georgia, B.C.)
 (2) : 177 (vertical migrations, alewife, L. Michigan)
 (7) : 1063 (predation, food conversion, larvae, Atlantic herring)
 (10) : 1565 (diurnal variations, silver hake, NW Atl.)
 (11) : 1658 (larvae, food, lampreys)
 (11) : 1751 (physiology, ecology, lampreys, sea lamprey)
 (11) : 1906 (adults, river lamprey, Pacific lamprey, B.C., Pac. Ocean)
 (11) : 1924 (anadromous species, sea lamprey, NW Atl.)
 (11) : 1953 (lampreys, Finland)
 (12) : 2554 (predation, food, variability, ringed seal, Alaska)
 (12) : 2294 (selective feeding, predation, prey vulnerability, bluegill, pumpkinseed)
 T 954 (grazing, green sea urchin, kelp, St. Margaret's Bay, N.S.)
 M 1573 (marine birds, Baffin I., N.W.T.)
 S 2721 (food, Atlantic salmon, W Greenland-Labrador Sea)
 CRD 80/4 (food, Arctic cod, Labrador, Nfld.)
 80/37 (stomach content, predation, Atlantic cod, Gulf of St. Lawrence)
- Finland**
 J 37(11) : 1953 (geographical distribution, life history, fishery management, lampreys)
 (11) : 1960 (geographical distribution, population number, larvae, European river lamprey, rivers, Bothnian Bay)
 (11) : 1967 (fisheries, catch statistics, catch/effort, European river lamprey, rivers, Bothnian Bay)
- Fire**
 J 37(3) : 328 (forest fire, environmental effects, watersheds, Experimental Lakes Area, NW Ont.)
- Fish catch statistics; Landing statistics**
 J 37(11) : 1967 (catch/effort, European river lamprey, rivers, Bothnian Bay, Finland)
 (ICNAF, data processing, data base) (pink salmon, Johnstone Strait, B.C.) (stocking organisms, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.) (stocking organisms, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.) (stocking organisms, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.) (landing statistics, fishing operations, Atlantic herring, Gaspé peninsula, Que.) (foreign fishing, monitoring, marine fishes, Pac. coast, Canada) (groundfish fisheries, NE Pac.) (landing statistics, trawling, Pacific cod, English sole, lingcod, Strait of Georgia, B.C.) (foreign fishing, Pacific ocean perch, Queen Charlotte Sound, B.C.) (by catch, fishery management, Atlantic salmon, N.S.) (purse seines, biological data, juveniles, Pacific salmon, Strait of Georgia, Nanaimo, B.C.) (purse seines, biological data, juveniles, Pacific salmon, Strait of Georgia, Nanaimo, B.C.) (groundfish, stock assessment, Pacific cod, Hecate Strait, B.C.) (commercial fishing, Arctic char, Cambridge Bay, N.W.T.) (length, age composition, English sole, Hecate Strait, B.C.) (commercial fishing, lake whitefish, Great Slave L., N.W.T.) (catch/effort, experimental fishing, freshwater fishes, Southern Indian L., Man.) (exploratory fishing, stock assessment, rockfishes, Queen Charlotte Is., B.C.) (exploratory fishing, stock assessment, rockfishes, Queen Charlotte Sound, B.C.) (exploratory fishing, stock assessment, rockfishes, Queen Charlotte Is., Vancouver I., B.C.) (roe, spawn abundance, Pacific herring, B.C.) (roe fishery, Pacific herring, B.C.) (biomass, catch composition, body weight, albacore, Queen Charlotte Sound, B.C.) (fishery surveys, haddock, St. Pierre Bank, NW Atl.) (landing statistics, stock assessment, pollock, ICNAF Div. 4VWX-5-6, NW Atl.) (landing statistics, stock assessment, haddock, ICNAF Div. 4X, NW Atl.)

- 80/3 (landing statistics, population dynamics, American lobster, Northumberland Strait, Gulf of St. Lawrence)
- 80/10 (noncatch, fishing mortality, Atlantic salmon, Greenland, Canada)
- 80/12 (exploitation, Atlantic salmon, Greenland, North America)
- 80/13 (fishing vessel statistics, stock assessment, haddock, ICNAF Div. 4VX, Scotian Shelf)
- 80/16 (fishery surveys, Atlantic cod, ICNAF Subdiv. 4Vn, NW Atl.)
- 80/19 (fishery surveys, ichthyoplankton surveys, stock assessment, white hake, ICNAF Div. 4T, Gulf of St. Lawrence)
- 80/22 (stock assessment, Atlantic cod, ICNAF Div. 4T, 4Vn, NW Atl.)
- 80/24 (landing statistics, population characteristics, stock assessment, Greenland halibut, Gulf of St. Lawrence)
- 80/27 (stock assessment, Atlantic cod, ICNAF Div. 3Pn, 4RS, NW Atl.)
- 80/31 (redfishes, Scotian Shelf)
- 80/32 (age, growth, removals, redfishes, Scotian Shelf)
- 80/34F (landing statistics, Greenland halibut, Gulf of St. Lawrence)
- 80/35 (landing statistics, stock assessment, witch flounder, St. Pierre Bank, NW Atl.)
- 80/36 (landing statistics, catch/effort, stock assessment, flatfishes, ICNAF Div. 4VWX, NW Atl.)
- 80/40 (removals, discards, Atlantic cod, ICNAF Div. 4Vn, NW Atl.)
- 80/41 (landing statistics, stock assessment, catch/effort, American plaice, NAFO Div. 4T, NW Atl.)
- 80/47 (stock assessment, yield predictions, Atlantic herring, ICNAF Div. 4WX, NW Atl.)
- 80/50 (stock assessment, Atlantic herring, ICNAF Subdiv. 4Vn, NW Atl.)
- 80/51 (stock assessment, Atlantic herring, W Nfld.)
- 80/52 (stock assessment, Atlantic herring, E Nfld.)
- 80/53 (stock assessment, American plaice, ICNAF Subdiv. 3Ps, NW Atl.)
- 80/54 (stock assessment, Atlantic herring, Gulf of St. Lawrence)
- 80/58 (stock assessment, catch/effort, American plaice, ICNAF Subarea 2, Div. 3K, NW Atl.)
- 80/61 (stock assessment, haddock, Scotian Shelf, ICNAF Div. 4Vn, NW Atl.)
- 80/65 (stock assessment, Atlantic mackerel, NAFO SA 3-6, NW Atl.)
- (6) : 1032 (whirling disease, detection, spore extraction)
- (8) : 1248 (diets, vitamin E, nutritive value, rainbow trout)
- (9) : 1373 (hatcheries, production, coho salmon, Puget Sound)
- (10) : 1499 (gill disease, bacteria, microbiological culture, salmonids)
- (10) : 1505 (bacterial diseases, fin rot, microbiological culture, Atlantic salmon)
- (12) : 2236 (hatcheries, bacteria, serological studies, *Aeromonas salmonicida*, Atlantic salmon, N.S.)
- SP 49 (embryonic development, incubation, fish eggs, sockeye salmon)
- T 899 (induced breeding, ovulation, coho salmon, Robertson Creek Salmon Hatchery, B.C.)
- 912 (incubation, sockeye salmon)
- 925 (stocking organisms, catch statistics, escapement, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.)
- 937 (rearing, freshwater, salt water, chum salmon)
- 941 (stocking organisms, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.)
- 943 (stocking organisms, catch statistics, escapement, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.)
- 946 (excretory products, recirculating systems, growth, coho salmon)
- 948 (cryobiology, gametes, carps, catfishes, Thailand)
- 949 (growth, survival, nursery ponds, L. Winnipegosis, Man.)
- M 1528 (escapement, Pacific salmon, Big Qualicum R., Vancouver I., B.C.)
- 1537 (incubation, gravel streams, escapement, chum salmon, Blaney Creek, B.C.)
- 1542 (hatcheries, incubation, fry, chum salmon, Thornton Creek, Vancouver I., B.C.)
- 1543 (spawning, biological data, hatcheries, chum salmon, Lower Bella Coola Valley, B.C.)
- D 169 (rearing, tagging, juveniles, coho salmon, Rosewall Creek, Vancouver I., B.C.)
- 171 (transplantation, census, Atlantic salmon, power plants, Saint John R. system, N.B.)
- 178 (hatcheries, stocking organisms, juveniles, Atlantic salmon, Saint John R. system, N.B.)
- 181 (transplantation, census, Atlantic salmon, Mactaquac Dam and Hatchery, Saint John R., N.B.)
- 202 (hatcheries, stocking organisms, rivers, Atlantic salmon, N.B., N.S.)
- I 109 (ponding, quality control, Pacific herring, Alert Bay, B.C.)
- Fish culture (see also Aquaculture; Aquaculture techniques; also Genetics)
- J 37(2) : 155 (oxygenation, gravel, spawning grounds, Pacific salmon)

- 115 (cage culture, fish ponds, rearing, rainbow trout, Scotts Pond, Nfld.)
- Fish eggs (see also Fish culture; also Roe)
- J 37(1) : 41 (oocytes, Pacific hake, Strait of Georgia, B.C.)
- (5) : 770 (pH, hatching, Atlantic salmon)
- (10) : 1522 (survival, habitat improvement, limestone, rainbow trout, George L., Ont.)
- SP 49 (embryonic development, incubation, fish culture, sockeye salmon)
- T 894 (spawning grounds, stock assessment, Pacific herring, B.C.)
- 896 (spawning, stock assessment, Pacific herring, French Creek, Qualicum Herring Sections, B.C.)
- 912 (ammonia, toxicity, sockeye salmon)
- M 1545 (spawning, stock assessment, Pacific herring, Chatham Sound, B.C.)
- 1547 (spawning, stock assessment, Pacific herring, Clayoquot Sound, B.C.)
- S 2736 (developmental stages, Atlantic tomcod, N.B.)
- Fish larvae (see also names of species)
- J 37(1) : 49 (new records, rare records, Scotian Shelf)
- (8) : 1314 (predation, alewife, Claytor L., Va.)
- (11) : 1616 (check lists, identification keys, morphology, lampreys, Great Lakes)
- (11) : 1641 (ecology, lampreys, Great Lakes)
- (11) : 1658 (feeding behavior, food, lampreys)
- (11) : 1665 (blood composition, osmoregulation, lampreys, World Waters)
- (11) : 1960 (geographical distribution, population number, European river lamprey, rivers, Bothnian Bay, Finland)
- (11) : 2103 (larvicides, toxicity, sea lamprey, Great Lakes)
- T 929 (fixation, body shrinkage, Atlantic cod)
- Fish oils
- J 37(8) : 1248 (oxidation, diets, vitamin E, rainbow trout)
- S 2663 (alcohol, food chains, capelin, Atlantic herring, Copepoda)
- Fish physiology
- J 37(4) : 733 (temperature preference, statistical analysis)
- (5) : 799 (VEN, chum salmon)
- (5) : 805 (blood, stress, rainbow trout)
- (8) : 1216 (anaerobiosis, metabolism, oxygen, rainbow trout, bluegill, brown bullhead)
- (9) : 1421 (excretion, ammonia, mathematical models, brook trout, rainbow trout)
- (10) : 1557 (temperature preference, habitat, sympatric populations, freshwater fishes, L. Michigan)
- (11) : 1665 (blood composition, osmoregulation, larvae, lampreys, World Waters)
- (11) : 1680 (neurosecretory system, evolution, lampreys)
- (11) : 1687 (metamorphosis, lampreys)
- (11) : 1711 (respiration, lampreys)
- (11) : 1723 (neurophysiology, brain, spinal cord, lampreys)
- (11) : 1739 (osmoregulation, ionic regulation, lampreys)
- (11) : 1751 (feeding behavior, lampreys, sea lamprey)
- (11) : 1762 (starvation, reproduction, mortality, lampreys)
- (11) : 2159 (bioenergetics, mathematical models, parasites, sea lamprey, Great Lakes)
- (12) : 2218 (food conversion, acclimation, new diets, rainbow trout)
- T 952 (literature reviews, downstream migrations, juveniles, Atlantic salmon)
- Fisheries (see also Demersal fisheries)
- J 37(11) : 1953 (fishery management, lampreys, Finland)
- (11) : 1967 (catch statistics, catch/effort, European river lamprey, rivers, Bothnian Bay, Finland)
- (11) : 1974 (European river lamprey, N Sweden)
- (11) : 2197 (stock assessment, methodology, predator control, Great Lakes)
- SP 48 (historical account, catch statistics, resource management, Pacific herring, Pac. coast, Canada)
- 52 (fishery resources, fishery economics, fishery management, Canada)
- T 834 (environmental impact, causeways, pelagic fisheries, Canso Strait, N.S.)
- 911 (inland fisheries, bibliographies, Canada)
- 938 (bibliographies, Y.T.)
- 942 (fishery development, potential resources, commercial species, squids, B.C.)
- 945F (fishing operations, Atlantic herring, Gaspé peninsula, Que.)
- M 1555 (reservoir fisheries, post impoundment, fishing effort, lake whitefish, Southern Indian L., Man.)
- 1563 (trawl fishery, landing statistics, Pacific cod, English sole, lingcod, Strait of Georgia, B.C.)
- D 184 (commercial fishing, catch statistics, fishery management, Arctic char, Cambridge Bay, N.W.T.)
- 194 (commercial species, lake whitefish, Great Slave L., N.W.T.)
- I 110 (catch statistics, roe, spawn abundance, Pacific herring, B.C.)

- 116 (catch statistics, catch composition, body weight, albacore, Queen Charlotte Sound, B.C.)
- 117 (potential resources, fishery development, economics, northern pink shrimp, NW Atl., Canada)
- CA (Annual report 1977-78, Canadian Atlantic Fisheries Scientific Advisory Committee, NW Atl.)
- CAD (Advisory documents 1977-78, Canadian Atlantic Fisheries Scientific Advisory Committee, NW Atl.)
- Fishery development
- T 904 (stock assessment, population characteristics, sea scallop, Northumberland Strait, Gulf of St. Lawrence)
- 942 (potential resources, commercial species, squids, B.C.)
- I 114 (potential resources, green sea urchin, St. Lawrence R.)
- 117 (potential resources, economics, northern pink shrimp, NW Atl., Canada)
- Fishery economics
- J 37(5) : 858 (economic surplus, sociological aspects)
- (7) : 1111 (fishery regulations, economic models, fishery management)
- (8) : 1321 (evaluation, sport fishing, recreation, Canada)
- (11) : 2169 (predator control, program evaluation, sea lamprey, Great Lakes)
- SP 52 (commercial fishing, sport fishing, fishery management, Canada)
- T 923 (resource development, Pacific salmon, B.C. coast)
- I 117 (fishery development, potential resources, northern pink shrimp, NW Atl., Canada)
- Fishery management
- J 37(4) : 561 (fishermen, Indians, predators, Pacific salmon, B.C.)
- (4) : 576 (marking, recruitment, predictions)
- (5) : 858 (sociological aspects)
- (7) : 1111 (economic models, fishery economics, fishery regulations)
- (7) : 1196 (environmental protection, environmental legislation, Great Lakes, America)
- (8) : 1276 (production models, potential yield, catch/effort)
- (8) : 1284 (catch/effort, Schaefer model, analytical techniques)
- (10) : 1467 (Atlantic cod, NW Atl.)
- (11) : 1588 (Great Lakes Fishery Commission, international agreements, sea lamprey)
- (11) : 1953 (lampreys, Finland)
- (11) : 2063 (predator control, sea lamprey, lake trout, L. Superior)
- (11) : 2193 (predator control, sea lamprey, program evaluation, Great Lakes)
- (11) : 2197 (fisheries, predator control, program evaluation, sea lamprey, Great Lakes)
- (11) : 2202 (proposed research, predator control, sea lamprey, Great Lakes)
- SP 48 (Pacific herring, Pac. coast, Canada)
- 52 (fishery resources, commercial fishing, sport fishing, Canada)
- T 834 (environmental impact, causeways, pelagic fisheries, American lobster, Canso Strait, N.S.)
- 893 (pink salmon, Johnstone Strait, B.C.)
- 923 (resource development, sociological aspects, fishery economics, Pacific salmon, B.C. coast)
- 932 (American lobster, NW Atl.)
- 956 (foreign fishing, monitoring, catch statistics, marine fishes, Pac. coast, Canada)
- 959 (stock assessment, Pacific herring, B.C.)
- M 1528 (Pacific salmon, Big Qualicum R., Vancouver I., B.C.)
- 1529 (fishery resources, chinook salmon, McGregor R., B.C.)
- 1533 (standardization, coding, regions, Pacific herring, B.C.)
- 1537 (fish culture, incubation, habitat improvement, chum salmon, Blaney Creek, B.C.)
- 1542 (fish culture, hatcheries, chum salmon, Thornton Creek, B.C.)
- 1544 (tagging, stock identification, Pacific herring)
- 1550 (stock assessment, yield predictions, roe, Pacific herring, B.C.)
- 1553 (stock assessment, Arctic grayling, northern pike, Mackenzie R., N.W.T.)
- 1558 (fishery resources, migrations, Pacific salmon, Marble R., Vancouver I., B.C.)
- 1583 (by catch, catch statistics, Atlantic salmon, N.S.)
- D 184 (commercial fishing, Arctic char, Cambridge Bay, N.W.T.)
- 185 (stock assessment, quota regulations, groundfish, B.C.)
- 208 (stock assessment, quota regulations, groundfish, NE Pac.)
- I 118 (spawning seasons, roe, Pacific herring, B.C.)
- S 2685 (predation, mathematical models)
- 2696 (reports, neuroanatomy, social behavior, whales)
- CRD 80/9 (season regulations, body weight, Atlantic salmon, Greenland)
- 80/12 (exploitation, mortality, catch statistics, Atlantic salmon, Greenland, North America)
- 80/14 (northern pink shrimp, ICNAF Div. 2H, 2J, Labrador, Nfld.)
- 80/49 (program evaluation, witch flounder, NAFO Div. 4RS, Gulf of St. Lawrence)

- 80/53 (quota regulations, American plaice, ICNAF Subdiv. 3Ps, NW Atl.)
- Fishery products (see also Processing fishery products)
- J 37(9) : 1458 (chilled products, storage effects, organoleptic properties, walleye pollock)
- T 913 (minced products, temperature effects, freezing storage, cusk)
- 916 (frozen, cured, organoleptic properties, harp seal, Nfld.)
- 921 (processing, preservation, roe, Pacific herring, B.C.)
- S 2657 (sterols, cholesterol)
- 2674 (minced products, quality control, proteins)
- Fishery regulations
- J 37(7) : 1111 (fishery economics, economic models, fishery management)
- CRD 80/9 (season regulations, body weight, Atlantic salmon, Greenland)
- Fishery resources (see also Stock assessment)
- SP 52 (fisheries, fishery economics, fishery management, Canada)
- T 945F (population characteristics, landing statistics, fishing operations, Atlantic herring, Gaspé peninsula, Que.)
- M 1510 (freshwater fishes, Great Bear R., N.W.T.)
- 1529 (life history, fishery management, parasites, chinook salmon, McGregor R., B.C.)
- 1558 (fishery management, migrations, Pacific salmon, Marble R., Vancouver I., B.C.)
- Fishery surveys
- T 915 (stock assessment, sea scallop, Bay of Fundy)
- 922 (population characteristics, biological data, freshwater fishes, Lower Churchill R., Labrador)
- M 1510 (freshwater fishes, Great Bear R., N.W.T.)
- 1559 (sport fishery, sampling, walleye, Mosquito Creek, N.W.T.)
- 1572 (stock assessment, walleye pollock, Dixon Entrance, B.C.)
- 1576 (population density, population structure, abalone, Lotbinière Bay, Emily Carr Inlet, B.C.)
- D 173 (biological data, quantitative distribution, walleye pollock, Dixon Entrance, Hecate Strait, Queen Charlotte Sound, Strait of Georgia, B.C.)
- 175 (freshwater fishes, biological data, lake whitefish, lake trout, N.W.T.)
- 187 (trawling, marine fishes, stock assessment, Dixon Entrance, B.C.)
- 191 (stock assessment, Pacific cod, Hecate Strait, B.C.)
- 192 (sampling, freshwater fishes, lakes, N.S.)
- 206 (midwater trawls, marine fishes, stock assessment, Vancouver I., B.C.)
- S 2680 (catch statistics, haddock, St. Pierre Bank, NW Atl.)
- CRD 80/16 (stock assessment, catch statistics, Atlantic cod, ICNAF Subdiv. 4Vn, NW Atl.)
- 80/18 (biomass, stock assessment, marine fishes, Scotian Shelf, Gulf of St. Lawrence)
- 80/19 (analysis, stock assessment, white hake, ICNAF Div. 4T, Gulf of St. Lawrence)
- Fishes (see also names of species)
- J 37(7) : 1086 (swimming speeds, bioenergetics, mathematical models)
- (9) : 1337 (growth, length-frequency analysis, mathematical models)
- T 964 (computer programs, age, growth)
- S 2688 (finfish, nutritional requirements, minerals)
- 2689 (finfish, nutritional requirements, lipids)
- 2732 (pollution monitoring, terbutryn, degradation)
- Fishing effort
- J 37(2) : 288 (potential yield, mathematical models, sea scallop, Georges Bank, NW Atl.)
- T 947 (catch/effort, abalone, B.C.)
- M 1555 (reservoir fisheries, post impoundment, lake whitefish, Southern Indian L., Man.)
- Fishing mortality
- S 2718 (population structure, lake trout)
- CRD 80/10 (noncatch, Atlantic salmon, Greenland, Canada)
- 80/11 (drift nets, escapement, Atlantic salmon, Greenland)
- Fishways
- T 952 (literature reviews, downstream migrations, juveniles, Atlantic salmon)
- M 1459 (power plants, tagging, spawning migrations, chinook salmon, Whitehorse Rapids Dam, Yukon R., Y.T.)
- 1541 (power plants, migrations, mortality, Atlantic salmon, Malay Falls, N.S.)
- D 171 (power plants, census, anadromous species, Atlantic salmon, Saint John R. system, N.B.)
- 181 (power plants, census, anadromous species, Atlantic salmon, Mactaquac Dam, Saint John R., N.B.)
- S 2687 (aquaculture techniques, enhancement, Atlantic salmon, Nfld.)
- Flatfishes (Pleuronectidae; Bothidae) (see also names of species)
- CRD 80/36 (landing statistics, catch/effort,

- stock assessment, ICNAF Div. 4VWX, NW Atl.)
- Flagfish, American (*Jordanella floridae*)
J 37(5) : 757 (oil wastes, toxicity)
- Flexibacter columnaris*
J 37(6) : 1040 (flexibacteria, biochemical analysis, freshwater fishes)
- Flounder, arrowtooth (*Atheresthes stomias*) (turbot)
D 187 (fishery surveys, Dixon Entrance, B.C.)
208 (stock assessment, quota regulations, NE Pac.)
- Flounder, Gulf Stream (*Citharichthys arctifrons*)
J 37(1) : 49 (new record, Scotian Shelf)
- Flounder, winter (*Pseudopleuronectes americanus*)
CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
80/36 (landing statistics, catch/effort, stock assessment, ICNAF Div. 4VWX, NW Atl.)
- Flounder, witch (*Glyptocephalus cynoglossus*)
T 905 (spawning, spawning grounds, Nfld., Labrador)
S 2655 (resource availability, diurnal variations, biomass, NW Atl.)
CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
80/35 (landing statistics, stock assessment, population structure, St. Pierre Bank, NW Atl.)
80/36 (landing statistics, catch/effort, stock assessment, ICNAF Div. 4VWX, NW Atl.)
80/49 (fishery management, program evaluation, NAFO Div. 4RS, Gulf of St. Lawrence)
- Flounder, yellowtail (*Limanda ferruginea*)
J 37(2) : 268 (exploitation, age composition, mathematical models)
T 905 (spawning, spawning grounds, Nfld., Labrador)
CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
80/36 (landing statistics, catch/effort, stock assessment, ICNAF Div. 4VWX, NW Atl.)
- Fluorescence; Fluorescence spectroscopy
J 37(4) : 719 (antibody techniques, detection, *Corynebacterium salmoninus*)
(6) : 1028 (phytoplankton, photosynthesis, Gulf of St. Lawrence, Gulf of Guinea)
S 2662 (measuring, alkaline phosphatase, Algae)
- Flyingfish, fourwing (*Hirundichthys affinis*)
J 37(1) : 49 (new record, Scotian Shelf)
- Food; Food availability; Food consumption
J 37(4) : 632 (bioaccumulation, diflubenzuron, brown bullhead, black crappie)
(4) : 679 (food absorption, phosphorus, yellow perch, L. Memphrenagog, Que.-Vt.)
(9) : 1411 (food resources, sympatric populations, pumpkinseed, northern longear sunfish, Mich.)
(11) : 1658 (Algae, larvae, lampreys)
(11) : 1762 (starvation, physiology, lampreys)
(11) : 2159 (bioenergetics, mathematical models, parasites, sea lamprey, Great Lakes)
(12) : 2254 (variability, feeding behavior, predation, ringed seal, Alaska)
(12) : 2294 (prey vulnerability, bluegill, pumpkinseed)
M 1573 (marine birds, Baffin I., N.W.T.)
S 2718 (population structure, lake trout)
2721 (feeding behavior, Atlantic salmon, W Greenland-Labrador Sea)
CRD 80/4 (feeding behavior, Arctic cod, Labrador, Nfld.)
80/33 (biomass, growth, Atlantic cod, Gulf of St. Lawrence)
80/37 (predation, Atlantic cod, Gulf of St. Lawrence)
- Food chains; Food webs
J 37(1) : 88 (amino acids, microorganisms, intestines, green sea urchin)
(4) : 742 (aquatic insects, carbon, Findley L., Wash.)
(12) : 2262 (zooplankton, fish kills, *Gonyaulax*, Atlantic herring, Bay of Fundy)
(12) : 2318 (trophic transfer, aromatics, northern quahog)
S 2663 (alcohol, fish oils, capelin, Atlantic mackerel, Atlantic herring, Copepoda)
- Food conversion
J 37(2) : 203 (temperature effects, growth, sockeye salmon, Babine L., B.C.)
(7) : 1063 (predation, larvae, Atlantic herring)
(7) : 1184 (temperature effects, feeding experiments, sockeye salmon)
(8) : 1254 (bioenergetics, dynamics, *Chironomus plumosus*, Bay of Quinte, L. Ontario)
(12) : 2218 (acclimation, new diets, rainbow trout)
- Food technology (see also Processing fishery products)
J 37(6) : 1038 (detection, vancomycin, American lobster)
T 902 (quality assurance, biochemical analysis, methodology, short-finned squid, Canada)

- 916 (organoleptic properties, frozen products, cured products, harp seal, Nfld.)
- S 2657 (cholesterol, sterols, fishery products)
- Foreign fishing
- T 956 (monitoring, fishery management, catch statistics, marine fishes, Pac. coast, Canada)
- M 1570 (catch statistics, stock assessment, potential yield, Pacific ocean perch, Queen Charlotte Sound, B.C.)
- Forest industry
- J 37(4) : 624 (clear-cutting, seston dynamics, streams, Appalachians, N.C.)
- (7) : 1076 (logging, environmental impact, macroinvertebrates, Calif.)
- Fraser River; Fraser River Estuary; Fraser River System, B.C.
- J 37(1) : 1 (ecological associations, feeding behavior, phytobenthos, *Eogammarus conferviculus*)
- M 1562 (habitat improvement, incubation, production, chum salmon, Inches Creek)
- 1564 (size distribution, pink salmon)
- D 207 (data centers, resource management, land use)
- Freezing storage (see Storage; Storage effects)
- Freshwater fishes (see also names of species)
- J 37(6) : 1040 (biochemical analysis, *Flexibacter columnaris*)
- (9) : 1449 (organoleptic properties, chemical compounds, walleye, northern pike, lake herring, lake whitefish, Cedar L., Man.)
- SP 44 (toxicity tests, chemical pollutants, analytical techniques)
- T 922 (fishery surveys, population characteristics, biological data, Lower Churchill R., Labrador)
- 950 (bibliographies, ambient pH, environmental effects, World Inland Waters)
- M 1510 (surveys, check lists, Great Bear R., N.W.T.)
- D 163 (population density, N.S.)
- 166 (population density, Restigouche R., N.B.)
- 170 (population density, Miramichi R., N.B.)
- 175 (fishery surveys, biological data, N.W.T.)
- 178 (population density, electroseining, Saint John R. system, N.B.)
- 192 (fishery surveys, biological sampling, lakes, N.S.)
- I 111 (mercury, Labrador)
- Freshwater lakes (see also names of lakes)
- J 37(1) : 111 (photosynthetic pigments, seston)
- (2) : 185 (oxygen depletion, ice cover, Canada)
- (12) : 2300 (primary production, humus, Man.)
- T 962 (water analysis, ions, acidification, N.B.)
- Frobisher Bay, Canada
- D 164 (zoobenthos, biological data)
- 205 (zoobenthos, biological data)
- 214 (biochemical composition, bioenergetics, zooplankton, marine crustaceans)
- Frogfish (*Antennarius* sp.)
- J 37(1) : 49 (new record, Scotian Shelf)
- Fry (see names of species)
- Fulmar, northern (*Fulmarus glacialis*)
- M 1573 (geographical distribution, feeding behavior, Baffin I., N.W.T.)
- Fulmarus glacialis* (see Fulmar, northern)
- Fundy, Bay of (N.B.-N.S.)
- J 37(1) : 49 (rare record, smooth dogfish, Chance Harbour)
- (12) : 2262 (fish kills, red tides, *Gonyaulax*, Atlantic herring)
- T 915 (fishery surveys, stock assessment, sea scallop)
- 920 (new records, identification keys, Polychaeta)
- S 2707 (lipids, fatty acids, *Corophium volutator*, Minas Basin)
- Furunculosis (*Aeromonas*) (see Diseases; Disease control)
- G
- Gadus macrocephalus* (see Cod, Pacific)
- morhua* (see Cod, Atlantic)
- Gear construction
- J 37(4) : 722 (BIONESS, zooplankton sampler)
- T 903 (BIONESS, plankton collecting devices, nekton collecting devices)
- Gear selectivity
- J 37(4) : 606 (bongo nets, plankton collecting devices)
- M 1548 (experimental trap fishing, octopus, Barkley Sound, B.C.)
- S 2720 (drift nets, Atlantic salmon, W Greenland-Labrador Sea)
- CRD 80/11 (drift nets, escapement, mortality, Atlantic salmon, Greenland)
- Genera, new (see New genera)
- Genetics (see also Fish culture)
- J 37(1) : 82 (stocking, hatcheries, brown trout, Sweden)
- (7) : 1149 (phenotypic variations,

- statistical analysis,
electrophoresis)
- (8) : 1225 (toxicants, chromosomes,
microbiological analysis,
Neanthes arenaceodentata)
- (9) : 1379 (growth, developmental stages,
age, Atlantic salmon)
- S 2655 (phenotypic variations, lipids,
dry matter, rainbow trout)
- 2729 (isoenzymes, dehydrogenases, chars)
- Geographical distribution (see Distribution)
- Georgia, Strait of, B.C.
- J 37(1) : 41 (oocytes, Pacific hake)
- (1) : 120 (predation, feeding behavior,
Coelenterata)
- M 1534 (spawning grounds, charts, aquatic
plants, Pacific herring, Stuart
Channel)
- 1538 (resident boating, recreation,
baseline studies)
- 1563 (trawling, landing statistics,
Pacific cod, English sole, lingcod)
- D 168 (seining, catch statistics,
juveniles, Pacific salmon, Nanaimo,
B.C.)
- 173 (fishery surveys, biological data,
quantitative distribution, walleye
pollock)
- 176 (seining, catch statistics,
juveniles, Pacific salmon, Nanaimo,
B.C.)
- Geotriidae (see Lampreys)
- Gillnets
- S 2720 (drift nets, gear selectivity,
Atlantic salmon, W Greenland-
Labrador Sea)
- CRD 80/11 (drift nets, gear selectivity,
escapement mortality, Atlantic
salmon, Greenland)
- Gills
- J 37(4) : 600 (ATP, growth, photoperiodicity,
chinook salmon)
- (10) : 1499 (gill disease, bactertia,
microbiological culture, salmonids)
- (11) : 1711 (morphology, respiration,
lampreys)
- Globicephala melaena* (see Whale, pilot)
- Glyptocephalus cynoglossus* (see Flounder, witch)
- Gobiidae
- J 37(1) : 49 (new records, Scotian Shelf)
- Goldeye (*Hiodon alosoides*)
- D 201 (catch/effort, experimental fishing,
reservoirs, Southern Indian L., Man.)
- Gonichthys coccoi* (Myctophidae)
- J 37(1) : 49 (rare records, Scotian Shelf)
- Gonyaulax* (see Poisons(biological))
- Goosander (*Mergus merganser*)
- J 37(11) : 1974 (predators, European river
lamprey, N Sweden)
- Goose, Canada (*Branta canadensis interior*)
- M 1573 (geographical distribution,
feeding behavior, Baffin I., N.W.T.)
- Gracilaria spp. (see Alga, red)
- Grayling, Arctic (*Thymallus arcticus*)
- M 1510 (fishery resources, Great Bear R.,
N.W.T.)
- 1553 (stock assessment, fishery
management, sport fishing statistics,
Mackenzie R., N.W.T.)
- D 199 (sport fishing statistics, biological
data, tagging, Kakiska R., N.W.T.)
- Great Lakes, America (see also Erie, Lake;
Huron, Lake; Michigan, Lake; Ontario, Lake;
Superior, Lake)
- J 37(7) : 1196 (environmental protection,
environmental legislation, resource
management)
- (11) : 1585-2214 (conferences, sea lamprey)
- (11) : 1588 (Great Lakes Fishery Commission,
international agreements, sea
lamprey)
- (11) : 1616 (check lists, identification
keys, morphology, lampreys)
- (11) : 1635 (spawning behavior, fecundity,
lampreys)
- (11) : 1641 (ecology, larvae, metamorphosis,
lampreys)
- (11) : 1811 (geographical distribution,
limiting factors, environmental
conditions, sea lamprey)
- (11) : 1827 (metamorphosis, temperature
effects, sea lamprey)
- (11) : 1835 (chemical control, population
density, population dynamics, sea
lamprey)
- (11) : 1861 (population characteristics,
variations, chemical control, sea
lamprey)
- (11) : 1886 (environmental effects, fish
kill, population control, sea
lamprey)
- (11) : 1895 (environmental effects, lamprey
control, aquatic organisms)
- (11) : 1989 (classification, lesions,
predators, sea lamprey, lake trout)
- (11) : 2007 (predatory-phase, sea lamprey)
- (11) : 2081 (pest control, system analysis,
sea lamprey)
- (11) : 2103 (predator control, larvicides,
toxicity, sea lamprey)
- (11) : 2108 (pest control, sterilization,
program evaluation)
- (11) : 2118 (predator control, barriers,
spawning migrations, sea lamprey)
- (11) : 2133 (population dynamics,
exploitation, predator control, sea
lamprey, lake trout)
- (11) : 2159 (bioenergetics, mathematical
models, parasites, sea lamprey)

- (11): 2169 (predator control, fishery economics, program evaluation, sea lamprey)
- (11): 2175 (population control, predators, program evaluation, sea lamprey)
- (11): 2193 (predation, fishery management, program evaluation, sea lamprey)
- (11): 2197 (stock assessment, fisheries, predator control, sea lamprey)
- (11): 2202 (fishery management, predator control, proposed research, sea lamprey)
- Great Lakes Fishery Commission
J 37(11): 1588 (historical account, sea lamprey)
- Great Slave Lake, N.W.T.
D 194 (commercial fishing, catch statistics, biological data, lake whitefish)
- Greeneye, longnose (*Parasudis triculenta*)
J 37(1): 49 (new record, Scotian Shelf)
- Greenland
S 2720 (gear selectivity, drift nets, Atlantic salmon)
2721 (food, feeding behavior, Atlantic salmon)
2722 (distribution, biomass, Atlantic salmon)
2723 (stock identification, scale reading, Atlantic salmon)
2724 (parasites, indicator species, stock identification, Atlantic salmon)
CRD 80/8 (regional variations, body weight, growth, Atlantic salmon)
80/9 (body weight, season regulations, Atlantic salmon)
80/10 (fishing mortality, noncatch, Atlantic salmon)
80/11 (gear selectivity, drift nets, escapement mortality, Atlantic salmon)
80/12 (exploitation, mortality, catch statistics, Atlantic salmon)
- Group effects
J 37(4): 716 (group measurements, mathematical models, regression analysis)
- Growth
J 37(1): 127 (von Bertalanffy growth curves, yield predictions)
(2): 203 (temperature effects, food conversion, sockeye salmon, Babine L., B.C.)
(2): 241 (variability, mathematical models, von Bertalanffy)
(2): 255 (exploitation, lake whitefish, N.W.T.)
(3): 355 (periphyton, acidification, Experimental Lakes Area, NW Ont.)
(4): 600 (gill ATP, photoperiodicity, chinook salmon)
- (4): 687 (growth curves, mathematical models, Richards function)
- (5): 871 (cell line, temperature effects, channel catfish)
- (5): 873 (population genetics, size-limit regulations, brown trout)
- (6): 920 (von Bertalanffy, statistical analysis)
- (6): 1000 (growth-time relationships, mathematical models, pink shrimp, brown shrimp, N.C.)
- (9): 1337 (length-frequency analysis, mathematical models, fishes)
- (9): 1379 (genetics, developmental stages, age, Atlantic salmon)
- (10): 1495 (otoliths, fry, sockeye salmon, B.C.)
- (11): 2159 (bioenergetics, mathematical models, parasites, sea lamprey, Great Lakes)
- T 907 (brook trout, Churchill R., Labrador)
- 937 (freshwater, salt water, fry, chum salmon)
- 946 (recirculating systems, excretory products, juveniles, coho salmon)
- 949 (nursery ponds, juveniles, walleye, L. Winnipegosis, Man.)
- 964 (computer programs, fishes)
- S 2660 (nutrients, ATP, *Scenedesmus quadricauda*)
- 2670 (phytoplankton, ATP, analytical techniques, Sargasso Sea)
- 2680 (haddock, St. Pierre Bank, NW Atl.)
- 2683 (mathematical models, Monod equation, Algae)
- 2713 (phytoplankton, nitrogen cycle, purines)
- CRD 80/5 (Arctic cod, Labrador, Nfld.)
- 80/8 (regional variations, body weight, Atlantic salmon, Greenland)
- 80/9 (body weight, Atlantic salmon, Greenland)
- 80/21 (Atlantic herring, ICNAF Div. 4WX, NW Atl.)
- 80/32 (otolith reading, redfishes, Scotian Shelf)
- 80/33 (food consumption, Atlantic cod, Gulf of St. Lawrence)
- 80/39 (American lobster, Nfld.)
- Guillemot, black (*Cephus grylle*)
M 1573 (geographical distribution, feeding behavior, Baffin I., N.W.T.)
- Guinea, Gulf of
J 37(6): 1028 (phytoplankton, fluorescence, photosynthesis)
- Gulf of... (see name of Gulf)
- Gurnard, flying (*Dactylopterus volitans*).
J 37(1): 49 (new record, Scotian Shelf)

H

- Habitat
 J 37(7) : 1130 (sedimentary modification, submerged cages, Polychaeta, Calif.)
 (9) : 1411 (ecological distribution, food resources, sympatric populations, pumpkinseed, northern longear sunfish, Mich.)
 (10) : 1514 (gravel, rivers, benthos, Oreg.)
 (10) : 1557 (temperature preference, sympatric populations, freshwater fishes, L. Michigan)
 M 1561 (breeding, ringed seal, Baffin I., N.W.T.)
 1577 (breeding, ringed seal, Bridport Inlet, Melville I., N.W.T.)
 D 79 (spawning, rivers, Pacific salmon, Prince George subdistrict, B.C.)
 80 (spawning, rivers, Pacific salmon, Statistical Area 24, Clayquot Sound, B.C.)
 140 (spawning, rivers, Pacific salmon, Statistical Area 27, Cape Cook to Cape Scott, Vancouver I., B.C.)
 161 (spawning, rivers, Pacific salmon, Lillooet-Pemberton subdistrict, B.C.)
 167 (spawning, rivers, Pacific salmon, Statistical Areas 22, 23, Vancouver I., B.C.)
 183 (spawning, rivers, Pacific salmon, Statistical Area 26, Kyuquot Sound, B.C.)
 203 (spawning, rivers, Pacific salmon, Chilliwack-Hope subdistrict, B.C.)
 211 (spawning, rivers, Pacific salmon, Cariboo subdistrict, B.C.)
- Habitat improvement
 J 37(10) : 1522 (limestone, eggs, fry, rainbow trout, George L., Ont.)
 T 924 (fertilization, nursery grounds, sockeye salmon, lakes, B.C.)
 M 1537 (incubation, gravel streams, chum salmon, Blaney Creek, B.C.)
 1562 (gravel incubation, chum salmon, Inches Creek, Fraser R. system, B.C.)
 1571 (restoration, estuaries, B.C.)
 D 202 (stocking, Atlantic salmon, rivers, N.B., N.S.)
- Habrobaenus* (see Chironomidae)
- Haddock (*Melanogrammus aeglefinus*)
 J 37(2) : 268 (mathematical models, exploitation, age composition)
 T 905 (spawning, spawning grounds, Nfld., Labrador)
 S 2664 (sexual maturity, spawning, population dynamics, St. Pierre Bank, NW Atl.)
 2680 (population dynamics, fishery surveys, catch statistics, St. Pierre Bank, NW Atl.)
 CRD 80/2 (stock assessment, population characteristics, landing statistics, ICNAF Div. 4X, NW Atl.)
 (stock assessment, catch statistics, fishing vessel statistics, ICNAF Div. 4VX, Scotian Shelf)
 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
 80/61 (stock assessment, catch statistics, population dynamics, Scotian Shelf, ICNAF Div. 4VW, NW Atl.)
- Haematractidium scombri*
 J 37(5) : 812 (parasites, Atlantic mackerel, NW Atl.)
- Hake, offshore (*Merluccius albidus*)
 J 37(1) : 49 (distribution, Scotian Shelf)
- Hake, Pacific (*Merluccius productus*)
 J 37(1) : 41 (oocytes, Strait of Georgia, B.C.) (Corrections on J 37(8): 1333)
 T 956 (foreign fishing, monitoring, catch statistics, Pac. coast, Canada)
 D 206 (fishery surveys, Vancouver I., B.C.)
 208 (stock assessment, quota regulations, NE Pac.)
- Hake, red (*Urophycis chuss*)
 J 37(1) : 49 (distribution, Scotian Shelf)
- Hake, silver (*Merluccius bilinearis*)
 J 37(10) : 1565 (feeding behavior, resource availability, diurnal variations, NW Atl.)
 CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
- Hake, white (*Urophycis tenuis*)
 CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
 80/19 (ichthyoplankton surveys, fishery surveys, stock assessment, ICNAF Div. 4T, Gulf of St. Lawrence)
- Halibut, Atlantic (*Hippoglossus hippoglossus*)
 CRD 80/36 (landing statistics, catch/effort, stock assessment, ICNAF Div. 4VWX, NW Atl.)
- Halibut, Greenland (*Reinhardtius hippoglossoides*) (turbot)
 CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
 80/24 (landing statistics, population characteristics, stock assessment, Gulf of St. Lawrence)
 80/34F (catch statistics, population structure, population dynamics, Gulf of St. Lawrence)
 80/36 (landing statistics, catch/effort, stock assessment, ICNAF Div. 4VWX, NW Atl.)

- Halibut, Pacific (*Hippoglossus stenolepis*)
 J 37(2) : 268 (mathematical models, exploitation, age composition)
 D 187 (fishery surveys, Dixon Entrance, B.C.)
- Halichoerus grypus* (see Seal, grey)
- Halimedesidae
 B 204 (new family, taxonomy, geographical distribution, B.C., Puget Sound)
- Haliothus* spp. (Hydromedusae)
 B 204 (new species, B.C., Puget Sound)
- Haliotis kamschatkana* (see Abalone)
- Halogens; Halogen compounds
 OD 3 (ocean dumping, legislation, literature reviews)
- Harbors
 M 1581 (wave climate, navigation, Canada coasts)
- Hard clam (see Quahog, northern)
- Hatcheries (see Fish culture)
- Hawk, rough-legged (*Buteo lagopus*)
 M 1573 (geographical distribution, feeding behavior, Baffin I., N.W.T.)
- Heat transfer
 S 2727 (winds, World Oceans)
- Heavy metals (see also Pollutants; Pollution; Pollution effects)
 J 37(3) : 373 (acidification, mobilization, sediments, Experimental Lakes Area, NW Ont.)
 (4) : 567 (toxicity, production, Copepoda)
 (4) : 647 (pollution effects, aquatic insects, indicator species, Chironomidae, Ohio)
 (10) : 1573 (bioaccumulation, northern pike, white sucker, lakes, Flin Flon, Man.)
- Helicolenus dactylopterus* (see Rosefish, blackbelly)
- Heptacarpus camtschaticus* (see Shrimp, northern coastal)
carinatus (see Shrimp, small-eyed coastal)
littoralis (see Shrimp, large-eyed coastal)
stimpsoni (see Shrimp, Stimpson's coastal)
- Heptageniidae (see Mayflies)
- Herbicides
 S 2732 (terbutryn, pollution monitoring, aquatic environment)
- Herring, Atlantic (*Clupea harengus harengus*)
 J 37(1) : 66 (subpopulation, stock identification, St. Lawrence R. estuary, Gaspé, Que.)
 (7) : 1063 (feeding, predation, food conversion)
 (12) : 2262 (fish kills, red tides, *Gonyaulax*, Bay of Fundy)
 T 919 (bibliographies, NW Atl.)
 945F (population characteristics, fishing operations, Gaspé peninsula, Que.)
 958 (condition factor, bioenergetics, body conditions, Nfld.)
 S 2663 (alcohols, fish oils, food chains, Copepoda)
 CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
 80/20 (population characteristics, population dynamics, stock assessment, ICNAF Div. 4X, NW Atl.)
 80/21 (growth, sexual maturity, ICNAF Div. 4WX, NW Atl.)
 80/47 (stock assessment, catch statistics, yield predictions, ICNAF Div. 4WX, NW Atl.)
 80/50 (catch statistics, stock assessment, ICNAF Subdiv. 4Vn, NW Atl.)
 80/51 (catch statistics, stock assessment, population characteristics, W Nfld.)
 80/52 (stock assessment, catch statistics, population characteristics, E Nfld.)
 80/54 (stock assessment, catch statistics, population characteristics, Gulf of St. Lawrence)
 80/59 (ichthyoplankton surveys, spawning, stock assessment, St. Lawrence R., Isle Verte)
- Herring, lake (*Coregonus artedii*) (cisco)
 J 37(9) : 1449 (organoleptic properties, chemical compounds, Cedar L., Man.)
 D 201 (catch/effort, experimental fishing, reservoirs, Southern Indian L., Man.)
- Herring, Pacific (*Clupea harengus pallasii*) (*Clupea pallasii*)
 SP 48 (life history, distribution, resource management, Pac. coast, B.C.)
 T 894 (spawning grounds, eggs, stock assessment, B.C.)
 896 (spawning, eggs, stock assessment, French Creek, Qualicum Herring Sections, B.C.)
 921 (roe, processing, preservation, B.C.)
 959 (stock assessment, population dynamics, B.C.)
 960 (stock assessment, population dynamics, Barkley Sound, B.C.)
 M 1533 (standardization, coding, geographic units, B.C.)
 1534 (spawning grounds, charts, aquatic plants, Stuart Channel, Strait of Georgia, B.C.)
 1536 (spawning grounds, charts, aquatic plants, Clayoquot Sound, B.C.)

- 1544 (tagging, stock identification, tag recovery)
 1545 (spawning, stock assessment, Chatham Sound, B.C.)
 1547 (spawning, stock assessment, Clayoquot Sound, B.C.)
 1549 (spawning grounds, charts, aquatic plants, Barkley Sound, B.C.)
 1550 (stock assessment, yield predictions, roe, B.C.)
 1554 (statistical analysis, sampling, methodology)
 1579 (spawning grounds, charts, aquatic plants, Thompson Bay, B.C.)
 1580 (spawning grounds, charts, aquatic plants, Laredo Sound, B.C.)
 D 187 (fishery surveys, Dixon Entrance, B.C.)
 206 (fishery surveys, Vancouver I., B.C.)
 209 (gonad maturation, biological data, Vancouver I., B.C.)
 I 109 (ponding, fish handling, processing, Alert Bay, B.C.)
 110 (catch statistics, roe, spawn abundance, B.C.)
 112 (landing statistics, roe fishery, stock assessment, B.C.)
 118 (spawning seasons, roe, fishery management, B.C.)
- Hexagenia* (see Mayflies)
- Hiodon alosoides* (see Goldeye)
- Hippoglossoides platessoides* (see Plaice, American)
- Hippoglossus hippoglossus* (see Halibut, Atlantic)
stenolepis (see Halibut, Pacific)
- Hirundichthys affinis* (see Flyingfish, fourwing)
- Holarctic region
 S 2678 (water quality, indicator species, Chironomidae)
- Homarus americanus* (see Lobster, American)
- Horizontal distribution (see Distribution)
- Howe Sound, B.C.
 T 951 (oxygen depletion, environmental effects, benthos, demersal fishes)
 D 217 (oxygen depletion, environmental effects, benthos, demersal fishes)
- Hudson Bay, Canada
 J 37(7): 1101 (power plants, environmental effects, hydrologic cycle)
 (12): 2242 (seston, ecology, trophic structure)
- Humus
 J 37(12): 2300 (primary production, reservoirs, lakes, Man.)
- Huron, Lake, America
 J 37(11): 1780 (historical account, dispersion, population control, sea lamprey)
 (11): 2039 (predator control, sea lamprey, population dynamics, lake whitefish)
 (11): 2146 (mortality, predators, sea lamprey, lake whitefish)
 T 917 (check lists, biomass, phytoplankton)
- Hydraulic structures
 T 834 (causeways, environmental impact, pelagic fisheries, American lobster, Canso Strait, N.S.)
- Hydrobiology
 T 926 (recording equipment, current meters)
- Hydrocarbons
 J 37(4): 738 (benzene, carbon 14, *Brachionus plicatilis*)
 (12): 2318 (aromatics, bioaccumulation, food chains, northern quahog)
 S 2691 (aromatics, bioaccumulation, measuring, Atlantic salmon)
 2698 (aromatics, alkylbenzenes, paraffins)
 OD 3 (ocean dumping, legislation, literature reviews)
- Hydrodynamics
 J 37(5): 823 (mathematical models, physicochemical properties, spring transition, L. Ontario)
- Hydrographic surveys; Hydrography
 J 37(1): 49 (ichthyofauna, Scotian Shelf)
 D 191 (G. B. Reed groundfish cruise no. 79-6, Hecate Strait, Queen Charlotte Sound, B.C.)
- Hydrolagus collieri* (see Ratfish)
- Hydrologic cycle
 J 37(3): 335 (water renewal, watersheds, Experimental Lakes Area, NW Ont.)
 (7): 1101 (seasonal variations, power plants, environmental effects, James Bay, Hudson Bay)
- Hydrology
 M 1556 (limnology, L. Winnipeg, Man.)
 1558 (water management, Marble R., Vancouver I., B.C.)
- Hydromedusae (see also names of species)
 B 204 (taxonomy, geographical distribution, B.C., Puget Sound)
- Hygophium benoiti* (Myctophidae)
 J 37(1): 49 (rare record, Scotian Shelf)
- Hymendora glacialis* (see Ambereye, northern)
- Hyperoodon ampullatus* (see Whale, bottlenose)

Hypolimnion

- J 37(1) : 72 (oxygen depletion, long term changes, L. Erie)
 (3) : 320 (injections, nutrients, eutrophication, Experimental Lakes Area, NW Ont.)
 (3) : 434 (phytoplankton culture, environmental effects, Experimental Lakes Area, NW Ont.)
 (10) : 1531 (oxygen consumption, primary production, L. Erie)

I

Ice navigation

- SP 45 (sea ice, bibliographies, Canada coasts, Northern Hemisphere oceans)

Ichthyomyzon castaneus (see Lamprey, chestnut)
fossor (see Lamprey, northern brook)
hubbsi (see Lamprey, mountain brook)
unicuspis (see Lamprey, silver)

Ichthyoplankton; Ichthyoplankton surveys

- J 37(1) : 49 (fish larvae, Scotian shelf)
 (2) : 143 (biological development, striped bass, Potomac R. estuary, Md.)
 CRD 80/19 (analysis, stock assessment, white hake, ICNAF Div. 4T, Gulf of St. Lawrence)
 80/59 (spawning, stock assessment, Atlantic herring, Isle Verte, St. Lawrence R. estuary)

ICNAF (International Commission for the Northwest Atlantic Fisheries)

- T 857 (catch statistics, data processing, data base)

Ictalurus nebulosus (see Bullhead, brown)
punctatus (see Catfish, channel)

Identification keys

- J 37(11) : 1616 (lampreys, Great Lakes)
 B 201 (*Stenonema*)
 202 (shrimps, NE Pac.)
 204 (Hydromedusae, B.C., Puget Sound)
 208 (snailfishes, arctic Canada)
 T 920 (Polychaeta, Bay of Fundy)

Illex illecebrosus (see Squid, short-finned)

Inconnu (*Stenodus leucichthys*)

- M 1510 (fishery resources, Great Bear R., N.W.T.)

Incubation

- J 37(1) : 770 (pH, eggs, Atlantic salmon)
 SP 49 (embryonic development, fish eggs, fish culture, sockeye salmon)
 T 912 (fish culture, sockeye salmon)
 M 1537 (gravel streams, chum salmon, Blaney Creek, B.C.)
 1542 (hatcheries, chum salmon, Thornton Creek, Vancouver I., B.C.)

- M 1562 (gravel streams, production, chum salmon, Inches Creek, Fraser R. system, B.C.)

Indicators; Indicator species

- J 37(3) : 442 (physiological, nutrient deficiency, phytoplankton, Experimental Lakes Area, NW Ont.)
 (4) : 647 (Chironomidae, pollution effects, heavy metals, Ohio)
 S 2678 (water quality, Chironomidae, holarctic region)
 2701 (metals, water milfoil, Flin Flon, Man.)
 2724 (parasites, stock identification, Atlantic salmon, Greenland)

Industrial wastes (see also Pollutants;

- Pollution; Pollution effects)
 J 37(2) : 248 (pulpmill effluents, pollution effects, algal settlements)
 T 909 (pulpmill effluents, pollution effects, quantitative distribution, Amphipoda, Isopoda, Port Mellon, B.C.)
 910 (pulpmill effluents, pollution effects, quantitative distribution, Amphipoda, Isopoda, Neroutsos Inlet, B.C.)

Information handling

- J 37(2) : 290 (box plots, limnological data, phosphorus)
 T 857 (data base, data processing, ICNAF catch statistics)
 M 1551 (manuals, methodology, reports, Department of Fisheries and Oceans, Canada)
 D 207 (data base, resource management, land use, Fraser R., B.C.)

Inhibitors

- J 37(9) : 1450 (cholinesterase inhibitors, insecticides, toxicity, rainbow trout)
 S 2673 (ecdysterone, molting, American lobster)

Inorganic compounds

- S 2714 (metals, seasonal variations, *Nereocystis luetkeana*, B.C. coast)
 2715 (non-metals, seasonal variations, *Nereocystis luetkeana*, B.C. coast)

Insecta (see Aquatic insects)

Insecticides (see Pesticides)

International agreements

- J 37(11) : 1588 (Great Lakes Fishery Commission, fishery management, sea lamprey)

International organizations

- J 37(11) : 1588 (Great Lakes Fishery Commission, historical account, sea lamprey)

International Whaling Commission (see Whales;
also names of species)

Interspecific relationships

- J 37(1) : 120 (predation, Coelenterata, Strait of Georgia, B.C.)
(7) : 1063 (feeding, larvae, Atlantic herring)
(7) : 1130 (aquatic communities, submerged cages, Polychaeta, Calif.)
(8) : 1314 (predation, introduced species, alewife, Claytor L., Va.)
(11) : 2193 (predation, sea lamprey, Great Lakes)
(12) : 2282 (zooplankton, variability, acidification, Clearwater L., Ont.)

Interstitial water

- J 37(3) : 545 (diffusion coefficients, Experimental Lakes Area, NW Ont.)

Introduced species

- J 37(8) : 1314 (interspecific relationships, alewife, Claytor L., Va.)

Invertebrate larvae (see also names of species)

- T 940 (manuals, population characteristics, Polychaeta, Passamaquoddy Bay, N.B.)
S 2686 (seed collection, artificial substrata, survival, sea scallop, Nfld.)

Invertebrates (see also names of organisms)

- J 37(6) : 957 (benthos, colonization, detritus, Otter Creek, Wis., East R., Col.)
(6) : 979 (sessile species, benthos, ecological distribution, Gulf of St. Lawrence, St. Lawrence R. estuary)
(7) : 1076 (environmental impact, logging, macroinvertebrates, Calif.)
(9) : 1358 (ordination, reciprocal averaging, statistical analysis, aquatic communities)
(11) : 1895 (environmental effects, lamp control, Great Lakes)
SP 44 (toxicity tests, chemical pollutants, analytical techniques)
D 214 (marine crustaceans, biochemical composition, bioenergetics, Frobisher Bay, Canada)

Ion exchange; Ions

- J 37(2) : 211 (metals, mathematical models, toxicity, *Daphnia magna*)
(8) : 1266 (sulfate, chlorides, water analysis)
(11) : 1739 (ion regulation, juveniles, adults, lampreys)
T 962 (water analysis, freshwater lakes, N.B.)

IPNV (Infectious pancreatic necrosis virus)
(see Diseases; Disease control)

Iron; Iron compounds

- J 37(8) : 1303 (water masses, age,

Experimental Lakes Area, NW Ont.)

Isopoda

- T 909 (quantitative distribution, pollution effects, pulpmill effluents, Port Mellon, B.C.)
910 (quantitative distribution, pollution effects, pulpmill effluents, Neroutsos Inlet, B.C.)
D 198 (geographical distribution, population structure, reproduction, *Mesidotea* spp., Beaufort Sea)

J

James Bay, Canada

- J 37(7) : 1101 (power plants, environmental effects, hydrologic cycle)

Jellyfish (*Aglantha digitale*)

- J 37(10) : 1550 (swimming, circadian rhythms)

Jordanella floridae (see Flagfish, American)

Juveniles (see names of species)

K

Karyotypes

- J 37(2) : 286 (chromosomes, cytological techniques, *Neanthes arenaceodentata*)

Kelp (*Laminaria*) (see Alga, brown)Kestrel, American (*Falco sparverius*)

- M 1573 (geographical distribution, feeding behavior, Baffin I., N.W.T.)

Keys, identification (see Identification keys)

Kinetics

- J 37(9) : 1398 (Knight Inlet, B.C.)
(10) : 1540 (ecosystems, phosphorus, yellow perch, L. Memphremagog, Que.-Vt.)

Kittiwake, black-legged (*Rissa tridactyla*)

- M 1573 (geographical distribution, feeding behavior, Baffin I., N.W.T.)

L

Labeo rohita (see Carp, Indian)

Labrador, Nfld.

- T 905 (spawning, spawning grounds, capelin, Atlantic cod, haddock, redfishes, American plaice, yellowtail flounder, witch flounder)
907 (age composition, growth, brook trout, Churchill R.)
922 (fishery surveys, water quality, reservoirs, Lower Churchill R.)
D 212 (sport fishing statistics, angling, catch/effort, Atlantic salmon)
I 111 (mercury, anadromous species, freshwater fishes)

- CRD 80/4 (food, feeding behavior, Arctic cod) (11): 1944 (ecology, N Europe)
 80/5 (age composition, growth, Arctic cod) (11): 1953 (geographical distribution,
 80/6 (otolith size, body size, Arctic cod) life history, fishery management,
 80/7 (morphometrics, meristic counts, Finland)
 gonads, Arctic cod)
 80/14 (stock assessment, resource
 availability, fishery management,
 northern pink shrimp, ICNAF Div.
 2H, 2J)
- Labrador Sea
 S 2720 (gear selectivity, drift nets,
 Atlantic salmon)
 2721 (food, feeding behavior, Atlantic
 salmon)
 2723 (stock identification, scale
 reading, Atlantic salmon)
- Labridae
 J 37(1): 49 (new records, Scotian Shelf)
- Lactophrys triqueter* (see Trunkfish, smooth)
- Lake morphology
 J 37(2): 185 (oxygen depletion, ice cover,
 freshwater lakes, Canada)
 M 1556 (limnology, L. Winnipeg, Man.)
 1575 (water analysis, physicochemical
 properties, Heming L., Man.)
- Laminaria* (see Alga, brown)
- Lampetra aepyptera* (see Lamprey, least brook)
ayresi (see Lamprey, river)
fluviatilis (see Lamprey, European
 river)
japonica (see Lamprey, arctic)
lamottei (see Lamprey, American brook)
planeri (see Lamprey, European brook)
tridentata (see Lamprey, Pacific)
- Lamprey, American brook (*Lampetra lamottei*)
 (*Lethenteron lamottenii*)
 J 37(11): 1616 (identification keys,
 morphology, Great Lakes)
 (11): 1635 (spawning behavior, fecundity,
 Great Lakes)
 (11): 1872 (endemic species, geographical
 distribution, chemical control,
 L. Superior)
- Lamprey, arctic (*Lampetra japonica*)
 (*Lethenteron japonicum*)
 J 37(11): 1944 (ecology, N Europe)
- Lamprey, chestnut (*Ichthyomyzon castaneus*)
 J 37(11): 1616 (identification keys,
 morphology, Great Lakes)
 (11): 1635 (spawning behavior, fecundity,
 Great Lakes)
- Lamprey, European brook (*Lampetra planeri*)
 J 37(11): 1658 (larvae, feeding behavior, food)
 (11): 1665 (blood composition,
 osmoregulation, larvae, World Waters)
 (11): 1711 (respiration, oxygen
 consumption, gills)
- Lamprey, European river (*Lampetra fluviatilis*)
 J 37(11): 1665 (blood composition,
 osmoregulation, larvae, World Waters)
 (11): 1711 (respiration, oxygen
 consumption, gills)
 (11): 1739 (osmoregulation, ionic
 regulation)
 (11): 1762 (starvation, reproduction,
 mortality)
 (11): 1944 (ecology, N Europe)
 (11): 1953 (geographical distribution,
 life history, fishery management,
 Finland)
 (11): 1960 (geographical distribution,
 population number, larvae, rivers,
 Bothnian Bay, Finland)
 (11): 1967 (fisheries, catch statistics,
 catch/effort, rivers, Bothnian Bay,
 Finland)
 (11): 1974 (ecology, N Sweden)
 (11): 1981 (scarring, powan, Loch Lomond,
 Scotland)
- Lamprey, least brook (*Lampetra aepyptera*)
 J 37(11): 1616 (identification keys,
 morphology, Great Lakes)
- Lamprey, mountain brook (*Ichthyomyzon hubbsi*)
 J 37(11): 1711 (respiration, oxygen
 consumption, gills)
- Lamprey, northern brook (*Ichthyomyzon fossor*)
 J 37(11): 1616 (identification keys,
 morphology, Great Lakes)
 (11): 1635 (spawning behavior, fecundity,
 Great Lakes)
 (11): 1872 (endemic species, geographical
 distribution, chemical control,
 L. Superior)
- Lamprey, Pacific (*Entosphenus tridentatus*)
 (*Lampetra tridentata*)
 J 37(11): 1906 (ecology, life history, B.C.,
 Pac. Ocean)
- Lamprey, river (*Lampetra ayresi*)
 J 37(11): 1906 (ecology, life history, B.C.,
 Pac. Ocean)
- Lamprey, sea (*Petromyzon marinus*)
 J 37(11): 1585-2214 (conferences, Great Lakes,
 World Waters)
 (11): 1585 (introduction, sea lamprey
 symposium)
 (11): 1588 (Great Lakes Fishery Commission,
 international agreements, fishery
 management)
 (11): 1616 (identification keys,
 morphology, Great Lakes)
 (11): 1630 (isoenzymes, electrophoresis,
 population genetics)

- (11): 1635 (spawning behavior, fecundity, Great Lakes)
 - (11): 1641 (ecology, larvae, metamorphosis, Great Lakes)
 - (11): 1665 (blood composition, osmoregulation, larvae, World Waters)
 - (11): 1687 (metamorphosis, morphology, physiology, N.B.)
 - (11): 1711 (respiration, oxygen consumption, gills)
 - (11): 1739 (osmoregulation, ionic regulation)
 - (11): 1751 (feeding behavior, ecology, physiology)
 - (11): 1780 (historical account, dispersion, population control, L. Huron, L. Michigan, L. Superior)
 - (11): 1802 (historical account, dispersion, population control, L. Erie, L. Ontario)
 - (11): 1811 (geographical distribution, limiting factors, environmental conditions, Great Lakes)
 - (11): 1827 (metamorphosis, temperature effects, Great Lakes)
 - (11): 1835 (chemical control, population density, population dynamics, Great Lakes)
 - (11): 1851 (chemical control, spawning migrations, streams, L. Superior)
 - (11): 1861 (population characteristics, variations, chemical control, Great Lakes)
 - (11): 1872 (population control, chemical control, L. Superior)
 - (11): 1886 (population control, environmental effects, fish kill, Great Lakes)
 - (11): 1895 (chemical control, environmental effects, aquatic organisms, Great Lakes)
 - (11): 1924 (ecology, life cycle, anadromous species, NW Atl.)
 - (11): 1944 (ecology, N Europe)
 - (11): 1953 (geographical distribution, life history, fishery management, Finland)
 - (11): 1989 (lesions, classification, lake trout, Great Lakes)
 - (11): 2007 (predatory-phase, Great Lakes)
 - (11): 2021 (parasitic phase, L. Ontario)
 - (11): 2039 (predators, chemical control, L. Huron)
 - (11): 2047 (lamprey control, predation, lake trout, L. Michigan)
 - (11): 2052 (predation, mortality, lake trout, Green Bay, Wis.)
 - (11): 2057 (predator control, L. Superior)
 - (11): 2063 (predation, mortality, lake trout, L. Superior)
 - (11): 2074 (predation, lake trout, Gull Island Reef, L. Superior)
 - (11): 2081 (pest control, system analysis, Great Lakes)
 - (11): 2093 (predator control, environmental legislation)
 - (11): 2103 (predator control, larvicides, toxicity, Great Lakes)
 - (11): 2108 (pest control, sterilization, program evaluation, Great Lakes)
 - (11): 2118 (predator control, barriers, spawning migrations, Great Lakes)
 - (11): 2123 (pheromones, population control)
 - (11): 2133 (predator control, population dynamics, lake trout, Great Lakes)
 - (11): 2146 (predators, mortality, lake whitefish, L. Huron)
 - (11): 2151 (predators, mortality, lake trout, Cayuga L., N.Y.)
 - (11): 2159 (bioenergetics, mathematical models, parasites, Great Lakes)
 - (11): 2169 (predator control, fishery economics, program evaluation, Great Lakes)
 - (11): 2175 (population control, predators, program evaluation, Great Lakes)
 - (11): 2193 (predation, fishery management, program evaluation, Great Lakes)
 - (11): 2197 (stock assessment, methodology, predator control, Great Lakes)
 - (11): 2202 (proposed research, predator control, fishery management, Great Lakes)
- Lamprey, silver (*Ichthyomyzon unicuspis*)
 J 37(11): 1616 (identification keys, morphology, Great Lakes)
- (11): 1635 (spawning behavior, fecundity, Great Lakes)
 - (11): 1872 (endemic species, geographical distribution, chemical control, L. Superior)
- Lampreys (Petromyzontidae; Geotriidae; Mordaciidae; see also names of species)
 J 37(11): 1585-2214 (conferences, Great Lakes, World Waters)
- (11): 1595 (biogeography, phylogeny, taxonomy, World Waters)
 - (11): 1616 (check lists, identification keys, morphology, Great Lakes)
 - (11): 1626 (taxonomy, terminology, morphology, World Waters)
 - (11): 1641 (ecology, larvae, metamorphosis, Great Lakes)
 - (11): 1658 (larvae, feeding behavior, food)
 - (11): 1665 (blood composition, osmoregulation, larvae, World Waters)
 - (11): 1680 (evolution, brain, pituitary gland, Agnatha)
 - (11): 1687 (metamorphosis, morphology, physiology)
 - (11): 1711 (respiration, oxygen consumption, gills)
 - (11): 1723 (neurophysiology, brain, spinal cord)
 - (11): 1739 (osmoregulation, ionic regulation)
 - (11): 1751 (feeding behavior, ecology, physiology)
 - (11): 1762 (starvation, reproduction, mortality)

- Lampricides (see Predator control)
- Land use
J 37(9) : 1439 (water quality, phosphorus, mathematical models, Higgins L., Mich.)
D 207 (data centers, Fraser R., B.C.)
- Landing statistics (see Fish catch statistics; also Shellfish catch statistics)
- Lanternfish, metallic (*Myctophum affine*)
J 37(1) : 49 (rare records, Scotian Shelf)
- Larvicides (see Predator control)
- Lead; Lead compounds
J 37(2) : 170 (toxicity, ascorbic acid, rainbow trout)
- Lebbeid, Okhotsk (*Lebbeus schrenckii*)
B 202 (new records, NE Pac.)
- Lebbeid, slope (*Lebbeus washingtonianus*)
B 202 (new records, NE Pac.)
- Lebbeus grandimanus* (see Shrimp, candy stripe)
polaris (see Shrimp, candy stripe)
schrenckii (see Lebbeid, Okhotsk)
washingtonianus (see Lebbeid, slope)
- Length-weight relationships
J 37(6) : 1000 (mathematical models, pink shrimp, brown shrimp, N.C.)
CRD 80/64 (age determination, northern pink shrimp, N.S.)
- Lepidopsetta bilineata* (see Sole, rock)
- Lepomis cyanellus* (see Sunfish, green)
gibbosus (see Pumpkinseed)
macrochirus (see Bluegill)
megalotis peltastes (see Sunfish, northern longear)
- Lesions
J 37(11) : 1981 (scarring, powan, European river lamprey, Loch Lomond, Scotland)
(11) : 1989 (classification, sea lamprey, lake trout, Great Lakes)
- Lethal limits (see Toxicants; Toxicity; Toxicity tests)
- Lethenteron japonicum* (see Lamprey, arctic)
lamottenii (see Lamprey, American brook)
- Leuckartiara* sp. (Hydromedusae)
B 204 (new species, B.C., Puget Sound)
- Life cycle; Life history
J 37(11) : 1595 (lampreys, World Waters)
(11) : 1762 (starvation, reproduction, mortality, lampreys)
(11) : 1906 (adults, river lamprey, Pacific lamprey, B.C., Pac. Ocean)
- (11) : 1924 (anadromous species, sea lamprey, NW Atl.)
(11) : 1944 (lampreys, N Europe)
(11) : 1953 (lampreys, Finland)
(11) : 2007 (predatory-phase, sea lamprey, Great Lakes)
(11) : 2021 (parasitic phase, sea lamprey, L. Ontario)
- SP 48 (Pacific herring, Pac. coast, Canada)
B 208 (taxonomy, geographical distribution, snailfishes, arctic Canada)
T 935 (ecology, literature reviews, Arctic char, W Arctic)
M 1529 (spawning, parasites, environmental conditions, chinook salmon, McGregor R., B.C.)
S 2676 (burrowing mayflies, L. Winnipeg, Man.)
2728 (literature reviews, Arctic char)
2736 (developmental stages, eggs, Atlantic tomcod, N.B.)
- Limanda ferruginea* (see Flounder, yellowtail)
- Limnology (see also Experimental Lakes Area, Northwestern Ontario)
J 37(1) : 111 (photosynthetic pigments, seston)
(2) : 290 (limnological data, phosphorus, information handling)
(6) : 1025 (nitrites, seasonal variations, deep water, L. Michigan)
(8) : 1317 (hydroextraction, flocculation, phytoplankton)
(9) : 1365 (ammonia, nitrates, metabolism, L. Ontario, L. Erie)
(9) : 1434 (oxygen depletion, thermodynamics, eutrophic lakes, Man.)
(10) : 1514 (sedimentation, gravel, rivers, Oreg.)
(10) : 1531 (oxygen consumption, hypolimnion, primary production, L. Erie)
T 911 (bibliographies, Canada)
924 (fertilization, primary production, lakes, B.C.)
933 (biological sampling, chlorophylls, isopleths, L. Ontario)
962 (acidification, freshwater lakes, N.B.)
M 1526 (water temperature, electrical conductance, dissolved oxygen, L. Winnipeg, Man.)
1556 (lake morphology, hydrography, watersheds, L. Winnipeg, Man.)
1558 (hydrology, fishery resources, Marble R., Vancouver I., B.C.)
1575 (morphology, water analysis, physicochemical properties, Heming L., Man.)
D 192 (freshwater lakes, N.S.)
200 (primary production, carbon, chlorophylls, phytoplankton)

- Lingcod* (*Ophiodon elongatus*)
 T 961 (catch/effort, catch statistics, NE Pac.)
 M 1563 (trawling, landing statistics, Strait of Georgia, B.C.)
 D 187 (fishery surveys, Dixon Entrance, B.C.)
- Liparis atlanticus* (see Snailfish, Atlantic)
fabricii (see Snailfish, gelatinous)
gibbus (see Snailfish, dusky)
tunicatus (see Snailfish, kelp)
- Lipids**
 J 37(2) : 195 (biochemical composition, fatty acids, green sea urchin, N.S.)
 (2) : 225 (metabolism, winter, juveniles, freshwater fishes)
 S 2655 (phenotypic variations, rainbow trout)
 2663 (fish oils, food chains, capelin, Atlantic mackerel, Atlantic herring, Copepoda)
 2666 (phospholipids, phytic acid, chromatographic techniques, rapeseed) (nutritional requirements, finfish)
 2689 (*Corophium volutator*, Minas Basin, Bay of Fundy)
- Literature reviews**
 T 935 (taxonomy, ecology, life history; Arctic char, W Arctic)
 952 (downstream migrations, juveniles, Atlantic salmon)
 S 2693 (catch statistics, gray whale, E Pac.)
 2728 (life history, population dynamics, morphology, Arctic char)
 OD 3 (ocean dumping, hazardous materials, legislation)
- Liver**
 J 37(2) : 163 (bioassays, enzymes, rainbow trout)
- Lizardfish, red** (*Synodus synodus*)
 J 37(1) : 49 (new record, Scotian Shelf)
- Lobster, American** (*Homarus americanus*)
 J 37(1) : 114 (double tagging, analysis)
 (6) : 945 (development, size-maturity, numerical analysis, Nfld.)
 (6) : 1038 (human food, vancomycin, detection)
 T 834 (environmental impact, causeways, Canso Strait, N.S.)
 932 (stock assessment, population characteristics, NW Atl.)
 954 (predators, ecosystems, resource management, St. Margaret's Bay, N.S.)
 S 2673 (molting, inhibitors, ecdysterone)
 2690 (shellfish culture, gaffkemia, *Aerococcus viridans*)
 2697 (recirculating systems, experimental research, shellfish culture)
 CRD 80/3 (population dynamics, landing statistics, Northumberland Strait, Gulf of St. Lawrence)
 80/17 (fecundity, Placentia Bay, Nfld.)
 80/39 (yield predictions, mathematical models, growth, Nfld.)
 80/42 (multiple fertilization, spawning)
 80/56 (stock assessment, landing statistics, long term changes, NW Atl.)
- Locomotion** (see Swimming)
- Loligo opalescens* (see Squid, opal)
- Long term changes**
 B 206 (paleolimnology, environmental impact, Bay of Quinte, L. Ontario)
 T 895 (variance analysis, environmental effects, Southern Indian L., Man.)
 930 (size distribution, age composition, chum salmon, NE Pac.)
 CRD 80/56 (landing statistics, catch/effort, stock assessment, American lobster, NW Atl.)
- Lopholatilus chamaeleonticeps* (see Tilefish)
- Lota lota* (see Burbot)
- M**
- Mackenzie River; Mackenzie River Estuary, N.W.T.**
 T 863 (environmental effects, geographical distribution, population number, white whale)
 M 1553 (stock assessment, fishery management, sport fishing statistics, Arctic grayling, northern pike)
- Mackerel, Atlantic** (*Scomber scombrus*)
 J 37(5) : 812 (parasites, *Haematractidium scombrus*, NW Atl.)
 S 2663 (alcohols, fish oils, food chains, Copepoda)
 CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
 80/65 (stock assessment, catch statistics, population characteristics, NAFO SA 3-6, NW Atl.)
- Mallotus villosus* (see Capelin)
- Manitoba (Province), Canada** (see also Prairie Provinces)
 J 37(6) : 927 (sampling, funnel traps, emergence, Chironomidae, Southern Indian L.)
 (7) : 1175 (algal blooms, summerkill, prairie lakes)
 (9) : 1434 (oxygen depletion, thermodynamics, eutrophic lakes)
 (9) : 1449 (organoleptic properties, chemical compounds, freshwater fishes, Cedar L.)
 (10) : 1573 (heavy metals, bioaccumulation,

- northern pike, white sucker, lakes, Flin Flon)
- (12): 2300 (primary production, humus, reservoirs, lakes)
- T 895 (long term changes, variance analysis, environmental effects, Southern Indian L.)
- 931 (spawning migrations, walleye, Southern Indian L.)
- 949 (growth, survival, nursery ponds, walleye, L. Winnipegosis)
- M 1526 (limnology, L. Winnipeg)
- 1540 (sediment analysis, geochemistry, L. Winnipeg)
- 1555 (reservoir fisheries, post impoundment, fishing effort, lake whitefish, Southern Indian L.)
- 1556 (lake morphology, hydrology, watersheds, L. Winnipeg)
- 1575 (morphology, water analysis, physicochemical properties, Heming L.)
- D 195 (mercury, bioaccumulation, walleye, northern pike, lake whitefish, Churchill-Rat-Burntwood, Nelson R. systems)
- 201 (experimental fishing, catch/effort, freshwater fishes, Southern Indian L.)
- S 2676 (quantitative distribution, life cycle, burrowing mayflies, L. Winnipeg)
- 2681 (fallout, metals, pollution monitoring, Flin Flon)
- 2701 (indicator species, metal, water milfoil, Flin Flon)
- Manuals
- SP 43 (teaching, entomology)
- T 940 (population characteristics, invertebrate larvae, Polychaeta, Passamaquoddy Bay, N.B.)
- M 1551 (methodology, information handling, reports, Department of Fisheries and Oceans, Canada)
- Marine birds (see also names of species)
- J 37(4) : 583 (nutrient cycles, St. Lawrence R. estuary)
- Marine fishes (see also names of species)
- J 37(1) : 49 (new records, rare records, Scotian Shelf)
- (12): 2266 (natural mortality, predictions, mathematical models)
- T 951 (oxygen depletion, environmental effects, demersal fishes, Howe Sound, B.C.)
- D 217 (oxygen depletion, environmental effects, demersal fishes, Howe Sound, B.C.)
- CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
- Marine mammals (see Aquatic mammals; also names of species)
- Marine pollution (see Pollutants; Pollution; Pollution effects; also Pollution monitoring)
- Maritime Provinces (see also New Brunswick; Nova Scotia)
- J 37(5) : 775 (population genetics, environmental effects, blue mussel)
- D 204 (pollution monitoring, bacteria, Atlantic oyster, 1979)
- Marking (see Tagging)
- Maryland State, USA
- J 37(2) : 143 (environmental conditions, spawning behavior, year-class success, striped bass, Potomac R. estuary)
- Mathematical models
- J 37(1) : 97 (simulation, energy flow, *Brachionus rubens*)
- (2) : 211 (toxicity, metals, ions, *Daphnia magna*)
- (2) : 241 (von Bertalanffy, growth, variability)
- (2) : 268 (exploitation, age composition, yellowtail flounder, Pacific halibut, haddock) (Corrections on J 37(8): 1333)
- (2) : 288 (Schaefer production model, potential yield, sea scallop, Georges Bank, NW Atl.)
- (3) : 513 (predictions, primary production, Experimental Lakes Area, NW Ont.)
- (3) : 552 (eddy diffusivity, Experimental Lakes Area, NW Ont.)
- (4) : 687 (parameters, growth curves, Richards function)
- (4) : 716 (group measurements)
- (5) : 823 (hydrodynamics, physicochemical properties, spring transition, L. Ontario)
- (6) : 1000 (growth, length-weight relationships, pink shrimp, brown shrimp, N.C.)
- (7) : 1086 (swimming speeds, bioenergetics, fishes)
- (7) : 1140 (Leslie matrix, biological data, population structure, yellow perch, Lochaber L., N.S.)
- (8) : 1229 (Schaefer model, catch/effort, statistical analysis)
- (8) : 1276 (production models, potential yield, methodology)
- (8) : 1284 (Schaefer model, catch/effort)
- (9) : 1337 (length-frequency analysis, growth, fishes)
- (9) : 1421 (ammonia, excretion, brook trout, rainbow trout)
- (9) : 1439 (phosphorus, water quality, Higgins L., Mich.)
- (11): 2133 (population dynamics, lake trout, Great Lakes)
- (11): 2159 (bioenergetics, growth, food consumption, sea lamprey, Great Lakes)

- (12): 2266 (natural mortality, predictions, marine fishes)
- (12): 2272 (standardization, catch/effort, stock assessment)
- (12): 2323 (recruitment, stable cycles, Dungeness crab, Calif.)
- B 203 (water circulation, inland seas, lakes)
- S 2656 (operations research, fuzzy sets)
- 2683 (Monod equation, growth, Algae)
- 2685 (predator-prey systems, fishery management)
- 2718 (production models, population structure, lake trout)
- 2727 (winds, heat transfer, World Oceans)
- CRD 80/23 (production models, population dynamics, redfishes)
- 80/25 (production models, stock assessment, redfishes, ICNAF Subarea 2, Div. 3K, NW Atl.)
- 80/26 (production models, stock assessment, catch/effort, redfishes, ICNAF Div. 3Ø, NW Atl.)
- 80/28 (production models, stock assessment, catch/effort, Atlantic cod, ICNAF Subdiv. 3Pn, 4R, 4S, NW Atl.)
- 80/29 (production models, stock assessment, catch/effort, Atlantic cod, ICNAF Subdiv. 3Ps, NW Atl.)
- 80/39 (yield predictions, American lobster, Nfld.)
- 80/63 (production models, catch/effort, Atlantic cod, ICNAF Div. 2GH, NW Atl.)
- Mayflies (Ephemeroptera)
- B 201 (taxonomy, identification keys, *Stenonema*, Heptageniidae)
- S 2676 (quantitative distribution, life cycle, *Hexagenia rigida*, *H. limbata*, *Ephoron album*, *Ephemera simulans*, L. Winnipeg, Man.)
- Megaptera novaeangliae* (see Whale, humpback)
- Melanogrammus aeglefinus* (see Haddock)
- Memphremagog, Lake, Que.-Vt., America
- J 37(4) : 679 (phosphorus cycle)
- (10): 1540 (phosphorus, kinetics, yellow perch)
- Mercenaria mercenaria* (see Quahog, northern)
- Mercury; Mercury compounds
- J 37(5) : 848 (ecosystems, Clay L., Ont.)
- (10): 1573 (bioaccumulation, northern pike, white sucker, lakes, Flin Flon, Man.)
- D 195 (bioaccumulation, walleye, northern pike, lake whitefish, Churchill-Rat-Burntwood, Nelson R. systems, Man.)
- I 111 (anadromous species, freshwater fishes, Labrador)
- OD 3 (ocean dumping, legislation, literature reviews)
- Mergus merganser* (see Goosander)
- Meristic counts
- J 37(4) : 725 (statistical analysis, capelin, NW Atl.)
- CRD 80/7 (Arctic cod, Labrador, Nfld.)
- Merluccius albidus* (see Hake, offshore)
- bilinearis* (see Hake, silver)
- productus* (see Hake, Pacific)
- Mesidotea* spp. (see Isopoda)
- Metabolism
- J 37(2) : 225 (lipids, winter, juveniles, freshwater fishes)
- (5) : 834 (rivers, McKenzie R., Oreg.)
- (8) : 1216 (anaerobiosis, oxygen, rainbow trout, bluebill, brown bullhead)
- (9) : 1365 (ammonia, nitrates, L. Ontario, L. Erie)
- S 2684 (methane, Methane L., N.W.T.)
- Metacrangon acclivis* (see Spinyhead, forked)
- variabilis* (see Spinyhead, deepsea)
- Metals
- J 37(2) : 211 (ions, toxicity, mathematical models, *Daphnia magna*)
- (8) : 1295 (interactions, toxicity, production, Copepoda)
- S 2681 (fallout, pollution monitoring, smelters, Flin Flon, Man.)
- 2701 (indicator species, water milfoil, Flin Flon, Man.)
- 2714 (seasonal variations, *Nereocystis luetkeana*, B.C. coast)
- Metamorphosis
- J 37(11): 1616 (check lists, identification keys, morphology, lampreys, Great Lakes)
- (11): 1641 (ecology, lampreys, Great Lakes)
- (11): 1687 (morphology, physiology, lampreys)
- (11): 1827 (temperature effects, age, length, sea lamprey, Great Lakes)
- (11): 1906 (river lamprey, Pacific lamprey, B.C., Pac. Ocean)
- Methane
- S 2684 (metabolism, Methane L., N.W.T.)
- Methodology
- J 37(5) : 817 (Lead-210 dating, phosphorus, sediment analysis, Bob L., Ont.)
- (8) : 1276 (potential yield, mathematical models)
- (8) : 1317 (flocculation, hydroextraction, phytoplankton)
- (12): 2225 (detection, trypsin, spores, whirling disease)
- SP 50 (toxicity tests, bibliographies, aquatic organisms)
- T 902 (biochemical analysis, quality assurance, short-finned squid, Canada)

- OD 1 (sediment sampling, sediment analysis, ocean dumping)
- Michigan, Lake, USA
 J 37(2) : 177 (vertical migrations, feeding behavior, predation, alewife, opossum shrimp, *Pontoporeia*)
 (3) : 403 (pollution effects, cadmium, plankton)
 (5) : 783 (stock identification, population genetics, lake whitefish)
 (6) : 1025 (nitrites, seasonal variations, deep water)
 (10) : 1557 (temperature preference, habitat, sympatric populations, freshwater fishes)
 (11) : 1780 (historical account, dispersion, population control, sea lamprey)
 (11) : 2047 (lamprey control, predation, population dynamics, lake trout)
- Michigan State, USA
 J 37(9) : 1411 (sympatric populations, ecological distribution, food resources)
 (9) : 1439 (phosphorus, water quality, mathematical models, Higgins L.)
- Microbiology
 J 37(1) : 88 (microorganisms, intestines, amino acids, green sea urchin)
 (8) : 1225 (chromosomes, genetic toxicants, *Neanthes arenaceodentata*)
 (10) : 1499 (bacteria, gill disease, salmonids)
 (10) : 1505 (bacterial diseases, fin rot, Atlantic salmon)
 S 2725 (polysaccharides, biosynthesis, *Aeromonas hydrophila*)
- Microgadus tomcod* (see Tomcod, Atlantic)
- Micropogonias undulatus* (see Croaker, Atlantic)
- Micropterus salmoides* (see Bass, largemouth)
- Microstomus pacificus* (see Sole, Dover)
- Migrations (see also Spawning migrations)
 J 37(2) : 177 (vertical, feeding behavior, alewife, L. Michigan)
 T 859 (spring season, bowhead whale, white whale, Beaufort Sea)
 952 (downstream, literature reviews, juveniles, Atlantic salmon)
 M 1541 (fishways, power plants, mortality, Atlantic salmon, Malay Falls, N.S.)
 1558 (fishery resources, fishery management, Pacific salmon, Marble R., Vancouver I., B.C.)
 D 165 (age composition, Atlantic salmon, Restigouche R., N.B.)
- Milfoil, water (*Myriophyllum exalbescent*)
 S 2701 (indicator species, metals, Flin Flon, Man.)
- Minnow, fathead (*Pimephales promelas*)
 J 37(4) : 670 (buoyancy, limiting factors, seasonal variations)
- Mollusca (sea also names of species)
 B 207 (check lists, biogeography, bivalve molluscs, Arctic, central, eastern Canada)
 T 906 (pollution detection, fenitrothion, analytical techniques, bivalve molluscs)
- Molting
 S 2673 (inhibitors, ecdysterone, American lobster)
- Molybdenum
 J 37(4) : 707 (nitrate uptake, photosynthesis, phytoplankton, Castle L., Calif.)
- Monitoring (see also Pollution monitoring)
 T 956 (foreign fishing, catch statistics, marine fishes, Pac. coast, Canada)
 D 179 (stock assessment, Pacific cod, Vancouver I., B.C.)
 180 (tagging, stock assessment, Pacific cod, Vancouver I., B.C.)
 215 (trawl locations, exploratory fishing, rockfishes, Queen Charlotte Is., B.C.)
 216 (trawl locations, exploratory fishing, rockfishes, Queen Charlotte Sound, B.C.)
 218 (trawl locations, exploratory fishing, rockfishes, Queen Charlotte Is., Vancouver I., B.C.)
- Monodon monoceros* (see Narwhal)
- Mordaciidae (see Lampreys)
- Morone saxatilis* (see Bass, striped)
- Morphology (organisms)
 J 37(11) : 1626 (lampreys, World Waters)
 (11) : 1687 (metamorphosis, lampreys)
 S 2679 (female genitalia, Chironomidae)
 2728 (literature reviews, Arctic char)
 CRD 80/7 (morphometrics, Arctic cod, Labrador, Nfld.)
- Mortality; Mortality causes
 J 37(2) : 225 (winter, juveniles, freshwater fishes)
 (7) : 1175 (summerkill, algal blooms, prairie lakes, Man.)
 (11) : 1762 (physiology, lampreys)
 (11) : 2052 (predation, sea lamprey, lake trout, Green Bay, Wis.)
 (11) : 2063 (fishing mortality, natural mortality, predation, lake trout, L. Superior)
 (11) : 2146 (lake whitefish, predators, sea lamprey, L. Huron)
 (11) : 2151 (predators, sea lamprey, lake trout, Cayuga L., N.Y.)

- (12): 2262 (red tides, *Gonyaulax*, Atlantic herring, Bay of Fundy)
- (12): 2266 (predictions, mathematical models, marine fishes)
- S 2680 (haddock, St. Pierre Bank, NW Atl.)
- 2730 (stranding, ecological aspects, Cetacea)
- CRD 80/12 (exploitation, catch statistics, Atlantic salmon, Greenland, North America)
- Mussel, blue (*Mytilus edulis*)
- J 37(5) : 775 (population genetics, environmental effects, Maritime Provinces)
- S 2704 (bioaccumulation, excretion, pesticides)
- Mussel, floater (*Anodonta grandis*)
- J 37(2) : 219 (calcium, nutrient cycles, shells, Shell L., N.W.T.)
- Mustelis canis* (see Dogfish, smooth)
- Myctophum affine* (see Lanternfish, metallic)
- Myriophyllum exalbescent* (see Milfoil, water)
- Mysis relicta* (see Shrimp, opossum)
- Mytilus edulis* (see Mussel, blue)
- Myxosoma cerebrales* (see Whirling disease)
- N
- Narwhal (*Monodon monoceros*)
- S 2694 (progress reports, research programs, Canada coasts)
- Navigation
- M 1581 (wave climate, harbors, Canada coasts)
- Neanthes* (see Polychaeta)
- Nekton collecting devices
- J 37(4) : 722 (BIONESS, gear construction)
- T 903 (BIONESS, gear construction)
- Nematoda
- J 37(7) : 1167 (toxicity tests, pollutants, long-term effects, *Panagrellus redivivus*)
- Nereis virens* (see Sandworm)
- Nereocystis luetkeana* (see Alga, brown)
- New Brunswick (Province, Canada (see also Fundy, Bay of; Maritime Provinces; Passamaquoddy Bay; Saint John River; Saint John River Estuary; Saint John River System)
- J 37(12) : 1687 (metamorphosis, morphology, physiology, sea lamprey)
- T 962 (water analysis, ions, acidification, freshwater lakes)
- 1568 (unconsolidated sediments, estuarine organisms, benthos, Amphipoda, Digdeguash R.)
- D 165 (age composition, migrations, sampling, Atlantic salmon, Restigouche R.)
- 166 (population density, freshwater fishes, Restigouche R.)
- 170 (population density, freshwater fishes, Miramichi R.)
- 202 (stocking, habitat improvement, rivers, Atlantic salmon)
- S 2736 (life history, developmental stages, eggs, Atlantic tomcod)
- New families
- B 204 (Halimedusidae, taxonomy, geographical distribution, B.C., Puget Sound)
- New genera
- J 37(1) : 20 (*Betapista*, NE Pac.)
- New records
- J 37(1) : 20 (*Terebellidae*, NE Pac.)
- (1) : 49 (marine fishes, fish larvae, Scotian Shelf)
- B 202 (shrimps, NE Pac.)
- 204 (*Hydromedusae*, geographical distribution, B.C., Puget Sound)
- T 920 (*Polychaeta*, Bay of Fundy)
- New species
- J 37(1) : 20 (*Betapista dekkeriae*, NE Pac.)
- B 202 (*Heptacarpus littoralis*, NE Pac.)
- 204 (*Hydromedusae*, taxonomy, geographical distribution, B.C., Puget Sound)
- New York-State, USA
- J 37(1) : 10 (predators, walleye, yellow perch, Oneida L.)
- (11) : 2151 (mortality, predators, sea lamprey, lake trout, Cayuga L.)
- New Zealand
- J 37(4) : 664 (phosphorus, distribution, availability, *Chlorella*)
- Newfoundland (Province), Canada (see also Labrador)
- J 37(2) : 283 (biometrics, beaks, sex determination, short-finned squid)
- (6) : 945 (development, size-maturity, numerical analysis, American lobster)
- (10) : 1467 (parasites, *Trypanosoma murmanensis*, Atlantic cod)
- T 905 (spawning, spawning grounds, capelin, Atlantic cod, haddock, redfishes, American plaice, yellowtail flounder, witch flounder)
- 916 (organoleptic properties, frozen products, cured products, harp seal)
- 958 (condition factor, bioenergetics, body conditions, Atlantic herring)

- M 1569 (physical oceanography, marine ecology, Logy Bay)
- D 212 (sport fishing statistics, angling, catch/effort, Atlantic salmon)
- I 115 (cage culture, fish ponds, rearing, rainbow trout, Scotts Pond)
- S 2686 (shellfish culture, seed collection, survival, sea scallop)
- 2687 (aquaculture techniques, enhancement, Atlantic salmon)
- CRD 80/17 (fecundity, American lobster, Placentia Bay)
- 80/39 (yield predictions, mathematical models, growth, American lobster)
- 80/51 (catch statistics, stock assessment, population characteristics, Atlantic herring, W Nfld.)
- 80/52 (stock assessment, catch statistics, population characteristics, Atlantic herring, E Nfld.)
- Niches
- S 2719 (ecology, fishery biology)
- Nitrogen; Nitrogen compounds
- J 37(4) : 707 (nitrate uptake, molybdenum, phytoplankton, Castle L., Calif.)
- (6) : 1025 (nitrites, seasonal variations, deep water, L. Michigan)
- (7) : 1175 (algal blooms, summerkill, prairie lakes, Man.)
- (9) : (1365 (nitrates, metabolism, L. Ontario, L. Erie)
- S 2658 (distribution, Sargasso Sea)
- Nitrogen cycle
- J 37(3) : 506 (denitrification, summer, stratification, Experimental Lakes Area, NW Ont.)
- (4) : 656 (denitrification, sediments, tubificid worms)
- S 2713 (purines, growth, phytoplankton)
- Nitrogen fixation
- J 37(3) : 488 (analytical techniques, phytoplankton, Experimental Lakes Area, NW Ont.)
- (3) : 494 (phytoplankton, Experimental Lakes Area, NW Ont.)
- North America
- CRD 80/12 (exploitation, mortality, catch statistics, Atlantic salmon)
- North Atlantic Ocean
- S 2671 (stock assessment, geographical distribution, finback whale)
- North Carolina State, USA
- J 37(4) : 624 (seston dynamics, clear-cutting, streams, Appalachians)
- (6) : 1000 (growth, length-weight relationships, mathematical models, pink shrimp, brown shrimp)
- Northern Hemisphere
- SP 45 (bibliographies, sea ice, ice navigation, oceans)
- Northumberland Strait, Gulf of St. Lawrence
- T 904 (stock assessment, population characteristics, sea scallop)
- CRD 80/3 (population dynamics, landing statistics, American lobster)
- Northwest Atlantic Ocean (see also Scotian Shelf)
- J 37(2) : 288 (mathematical models, potential yield, fishing effort, sea scallop, Georges Bank)
- (4) : 725 (meristic counts, statistical analysis, capelin)
- (5) : 812 (parasites, *Haematractidium scombr*, Atlantic mackerel)
- (10) : 1467 (fishery management, Atlantic cod)
- (10) : 1565 (feeding behavior, resource availability, diurnal variations, silver hake)
- (11) : 1924 (ecology, life cycle, anadromous species, sea lamprey)
- (12) : 2358 (echo surveys, size distribution, sperm whale)
- T 919 (bibliographies, Atlantic herring)
- 932 (stock assessment, population characteristics, American lobster)
- I 117 (fishery development, economics, potential resources, northern pink shrimp)
- S 2664 (sexual maturity, spawning, population dynamics, haddock, St. Pierre Bank)
- 2665 (resource availability, diurnal variations, biomass, witch flounder)
- 2680 (population dynamics, fishery surveys, catch statistics, haddock, St. Pierre Bank)
- CA (Annual report 1977-78, Canadian Atlantic Fisheries Scientific Advisory Committee)
- CAD (Advisory documents 1977-78, Canadian Atlantic Fisheries Scientific Advisory Committee)
- CRD 80/1 (stock assessment, population characteristics, landing statistics, pollock, ICNAF Div. 4VWX-5-6)
- 80/2 (stock assessment, population characteristics, landing statistics, haddock, ICNAF Div. 4X)
- 80/15 (exploratory fishing, resource availability, northern pink shrimp, striped pink shrimp, Ungava Bay, E Hudson Strait, ICNAF Div. 2G)
- 80/16 (fishery surveys, stock assessment, catch statistics, Atlantic cod, ICNAF Subdiv. 4Vn)
- 80/20 (population characteristics, population dynamics, stock assessment, Atlantic herring, ICNAF Div. 4X)
- 80/21 (growth, sexual maturity, Atlantic herring, ICNAF Div. 4WX)
- 80/22 (stock assessment, population characteristics, catch statistics, Atlantic cod, ICNAF Div. 4T, 4Vn)

- 80/25 (production models, stock assessment, redfishes, ICNAF Subarea 2, Div. 3K)
- 80/26 (stock assessment, catch/effort, production models, redfishes, ICNAF Div. 3P)
- 80/27 (stock assessment, population characteristics, catch statistics, Atlantic cod, ICNAF Div. 3Pn, 4RS)
- 80/28 (stock assessment, catch/effort, production models, Atlantic cod, ICNAF Subdiv. 3Pn, Div. 4R, 4S)
- 80/29 (stock assessment, production models, catch/effort, Atlantic cod, ICNAF Subdiv. 3Ps)
- 80/30 (taxonomy, stock identification, population genetics, redfishes, blackbelly rosefish, NAFO Div. 4VWX)
- 80/35 (landing statistics, stock assessment, population structure, witch flounder, St. Pierre Bank)
- 80/36 (landing statistics, catch/effort, stock assessment, flatfishes, ICNAF Div. 4VWX)
- 80/38 (stock assessment, fishing vessel statistics, Atlantic cod, ICNAF Div. 4VsW)
- 80/40 (catch statistics, removals, discards, Atlantic cod, ICNAF Div. 4Vn)
- 80/41 (stock assessment, landing statistics, catch/effort, American plaice, NAFO Div. 4T)
- 80/46 (stock assessment, population dynamics, Atlantic cod, ICNAF Div. 4X)
- 80/47 (stock assessment, catch statistics, yield predictions, Atlantic cod, ICNAF Div. 4WX)
- 80/48 (stock assessment, population characteristics, yield predictions, Atlantic cod, ICNAF Subdiv. 3Ps)
- 80/50 (catch statistics, stock assessment, Atlantic herring, ICNAF Subdiv. 4Vn)
- 80/53 (stock assessment, catch statistics, American plaice, ICNAF Subdiv. 3Ps)
- 80/56 (stock assessment, landing statistics, long term changes, American lobster)
- 80/58 (stock assessment, catch statistics, catch/effort, American plaice, ICNAF Div. 3K)
- 80/62 (stock assessment, statistical analysis, population characteristics, redfishes)
- 80/63 (stock assessment, catch/effort, production models, Atlantic cod, ICNAF Div. 2GH)
- 80/65 (stock assessment, catch statistics, population characteristics, Atlantic mackerel, NAFO SA 3-6)
- Northwest Territories (Territory), Canada (see also Baffin Island; Great Slave Lake; Mackenzie River; Mackenzie River Estuary)
- J 37(2) : 219 (calcium, nutrient cycles, shells, floater mussel, Shell L.)
- (2) : 255 (growth, recruitment, exploitation, lake whitefish)
- M 1510 (fishery surveys, freshwater fishes, check lists, Great Bear R.)
- 1546 (resource development, environmental impact)
- 1559 (sport fishery, fishery surveys, sampling, walleye, Mosquito Creek)
- 1577 (breeding, habitat, ringed seal, Bridport Inlet, Melville I.)
- D 175 (fishery surveys, freshwater fishes, biological data, lake whitefish, lake trout)
- 184 (catch statistics, biological data, fishery management, Arctic char, Cambridge Bay)
- 186 (sport fishing statistics, catch/effort, biological data, freshwater fishes, walleye, Mosquito Creek)
- 188 (sport fishing statistics, angling, catch/effort, walleye, Hay R.)
- 199 (sport fishing statistics, biological data, tagging, Arctic grayling, Kakisa R.)
- S 2684 (methane, metabolism, pipelines, Methane L.)
- 2672 (organic constituents, calories, seasonal variations, *Onisimus (=Boeckosimus) affinis*, Eskimo Lakes)
- Norway
- S 2709 (biological surveys, breeding, grey seal)
- 2710 (biological surveys, population number, harbor seal, grey seal)
- Notropis hudsonius* (see Shiner, spottail)
- Noturus flavus* (see Stonecat)
- Nova Scotia (Province), Canada (see also Canso Strait; Cape Breton; Fundy, Bay of; Maritime Provinces; St. Margaret's Bay)
- J 37(2) : 195 (lipids, biochemical composition, fatty acids, green sea urchin)
- (7) : 1140 (mathematical models, biological data, population structure, yellow perch, Lochaber L.)
- (8) : 1209 (suspended matter, variability, environmental effects, Petpeswick Inlet)
- (9) : 1837 (mudflats, sedimentation, ecology, Windsor)
- (12) : 2236 (bacteria, serological studies, hatcheries, *Aeromonas salmonicida*, Atlantic salmon)
- T 934 (physical oceanography, organic suspended matter, primary production, St. Georges Bay)
- M 1541 (power plants, fishways, migrations, Atlantic salmon, Malay Falls)
- 1566 (sport fishing statistics, biological surveys, stock assessment, striped bass, Annapolis R.)

- 1583 (by catch, catch statistics, fishery management, Atlantic salmon)
- D 163 (population density, freshwater fishes, Atlantic salmon)
- 192 (environmental surveys, limnological data, fishery surveys, lakes)
- 202 (stocking, habitat improvement, rivers, Atlantic salmon)
- CRD 80/64 (age determination, length-weight relationships, northern pink shrimp)
- Nursery grounds
- T 924 (fertilization, primary production, sockeye salmon, lakes, B.C.)
- 957 (check lists, biomass, zooplankton, sockeye salmon, B.C.)
- Nutrient cycles
- J 37(2) : 219 (calcium, shells, floater mussel, Shell L., N.W.T.)
- (4) : 583 (marine birds, St. Lawrence R. estuary)
- Nutrient deficiency
- J 37(3) : 442 (physiological indicators, phytoplankton, Experimental Lakes Area, NW Ont.)
- Nutrients
- J 37(3) : 320 (injections, hypolimnion, eutrophication, Experimental Lakes Area, NW Ont.)
- (4) : 589 (geographical distribution, water masses, summer, Canadian Archipelago)
- (10) : 1540 (phosphorus, kinetics, ecosystems, yellow perch, L. Memphremagog, Que.-Vt.)
- T 934 (organic suspended matter, seasonal variations, St. Georges Bay, N.S.)
- S 2660 (growth, ATP, *Scenedesmus quadricauda*)
- 2683 (competition, Algae)
- Nutrition: Nutritional requirements
- J 37(4) : 679 (phosphorus, yellow perch)
- (8) : 1248 (vitamin E, fish oils, diets, rainbow trout)
- S 2688 (minerals, finfish)
- 2689 (lipids, finfish)
- O
- Obelia* spp. (Hydromedusae)
- B 204 (new species, B.C., Puget Sound)
- Ocean dumping
- OD 1 (sediment sampling, sediment analysis, methodology)
- 2 (annotated bibliographies, research programs)
- 3 (hazardous materials, legislation, literature reviews)
- Oceanographic equipment (see Equipment)
- Oceanography
- J 37(9) : 1398 (water circulation, kinetics, Knight Inlet, B.C.)
- SP 51 (oceanographic equipment, catalogues, Canada)
- B 203 (water circulation, mathematical models, inland seas, lakes)
- T 834 (environmental impact, causeways, Canso Strait, N.S.)
- 934 (physical oceanography, St. Georges Bay, N.S.)
- 951 (dissolved oxygen, Howe Sound, B.C.)
- M 1569 (water temperature, salinity, Logy Bay, Nfld.)
- 1574 (oceanographic data, physicochemical properties, Queen Charlotte Sound, Hecate Strait, Dixon Entrance, B.C.)
- D 160 (oceanographic data, environmental surveys, B.C.)
- 172 (physical data, chemical data, pollution monitoring, Quatsino Sound, Neroutsos Inlet, B.C.)
- 187 (cruises, M/V Arctic Harvester, Dixon Entrance, B.C.)
- 206 (cruises, G. B. Reed, Vancouver I., B.C.)
- 210 (environmental conditions, B.C. coast)
- 217 (dissolved oxygen, Howe Sound, B.C.)
- S 2727 (wind stress, heat transfer, sensors, World Oceans)
- 2733 (wind stress, drag coefficient, sea ice, Arctic)
- Octopus (Octopus dofleini)*
- M 1548 (experimental trap fishing, gear selectivity, Barkley Sound, B.C.)
- Octopus dofleini* (see *Octopus*)
- Odobenus rosmarus* (see *Walrus*)
- Ogcocephalidae
- J 37(1) : 49 (new record, Scotian Shelf)
- Ohio State, USA
- J 37(4) : 647 (heavy metals, pollution effects, indicator species, Chironomidae)
- Oil pollution (see also Oil spills; also Pollutants; Pollution; Pollution effects)
- J 37(5) : 757 (oil wastes, toxicity, American flagfish)
- Oil spills
- T 901 (potential, environmental effects, Passamaquoddy Bay, N.B.)
- Oligochaeta
- J 37(4) : 656 (nitrogen cycle, denitrification, sediments, tubificid worms)
- Ommastrephes bartramii* (see *Squid*, flying)
- Omisis* (see *Chironomidae*)

- Oncorhynchus gorbusha* (see Salmon, pink)
 keta (see Salmon, chum)
 kisutch (see Salmon, coho)
 nerka (see Salmon, sockeye)
 spp. (see Salmon, Pacific in general))
 tshawytscha (see Salmon, chinook)
- Onisimus* (see Amphipoda)
- Ontario (Province), Canada (see also Experimental Lakes Area)
 J 37(5) : 817 (lead-210 dating, sediment analysis, phosphorus, Bob L.)
 (5) : 848 (ecosystems, selenium, mercury, Clay L.)
 (10) : 1522 (habitat improvement, eggs, fry, rainbow trout, George L.)
 (12) : 2282 (zooplankton, variability, acidification, Clearwater L.)
- Ontario, Lake, America
 J 37(5) : 823 (hydrodynamics, mathematical models, physicochemical properties)
 (8) : 1254 (bioenergetics, dynamics, food conversion, *Chironomus plumosus*, Bay of Quinte)
 (9) : 1365 (ammonia, nitrates, metabolism)
 (11) : 1802 (historical account, dispersion, population control, sea lamprey)
 (11) : 2021 (parasitic phase, sea lamprey)
 B 206 (paleolimnology, environmental impact, long term changes, Bay of Quinte)
 T 933 (biological sampling, chlorophylls, isopleths)
- Onychoteuthis borealijaponica* (see Squid, nail)
- Operations research
 S 2656 (mathematical models, fuzzy sets)
- Ophidion selenops* (see Cusk-eel, mooneye)
- Ophiodon elongatus* (see Lingcod)
- Orcinus orca* (see Whale, killer)
- Orconectes virilis* (see Crayfish)
- Oregon State, USA
 J 37(5) : 834 (rivers, metabolism, McKenzie R.)
 (10) : 1514 (rivers, gravel, habitat)
- Organic compounds
 S 2661 (chemical extraction, chromatographic techniques)
 2698 (alkylbenzenes, paraffins)
 2731 (pollutants, sediment analysis)
- Organic constituents
 S 2672 (seasonal variations, *Onisimus* (=Boeckosimus) *affinis*, Eskimo Lakes, N.W.T.)
- Organoleptic properties
 J 37(9) : 1449 (chemical compounds, freshwater fishes, Cedar L., Man.)
- (9) : 1458 (storage effects, chilled storage, walleye pollock)
 (frozen products, cured products, harp seal, Nfld.)
- T 916
- Orientation behavior
 J 37(4) : 693 (zooplankton, euphausiids, Gulf of St. Lawrence)
- Osmerus mordax* (see Smelt, rainbow)
- Osmoregulation
 J 37(2) : 225 (winter, juveniles, freshwater fishes)
 (11) : 1665 (larvae, lampreys, World Waters)
 (11) : 1739 (juveniles, adults, lampreys)
- Otoliths; Otolith reading
 J 37(10) : 1495 (growth, fry, sockeye salmon, B.C.)
 T 929 (aging methods, larvae, Atlantic cod)
 CRD 80/6 (otolith size, body size, Arctic cod, Labrador, Nfld.)
 80/32 (age, growth, redfishes, Scotian Shelf)
- Oxidation
 J 37(8) : 1248 (fish oils, diets, vitamin E, rainbow trout)
- Oxygen
 J 37(8) : 1216 (anaerobiosis, metabolism, rainbow trout, bluegill, brown bullhead)
 M 1526 (dissolved, L. Winnipeg, Man.)
 S 2669 (hypoxemia, toxicity, chemical pollutants, rainbow trout)
- Oxygen consumption
 J 37(10) : 1531 (hypolimnion, primary production, L. Erie)
 (11) : 1711 (respiration, lampreys)
- Oxygen depletion
 J 37(1) : 72 (hypolimnion, long term changes, L. Erie)
 (2) : 185 (lake morphology, trophic structure, ice cover, freshwater lakes, Canada)
 (9) : 1434 (thermodynamics, eutrophic lakes, Man.)
 T 951 (environmental effects, demersal fishes, benthos, Howe Sound, B.C.)
 D 217 (environmental effects, demersal fishes, benthos, Howe Sound, B.C.)
- Oxygenation
 J 37(2) : 155 (gravel, spawning grounds, Pacific salmon)
- Oyster, Atlantic (*Crassostrea virginica*) (American oyster)
 J 37(6) : 964 (larvae, vibriosis, pathogenesis)
 D 204 (pollution monitoring, bacteria, Maritime Provinces 1979)

P

- Pacific Ocean (see also Puget Sound)
- J 37(1) : 20 (new species, new records, taxonomy, Terebellidae, NE Pac.)
- (11): 1906 (ecology, life history, river lamprey, Pacific lamprey, B.C. coast)
- (12): 2362 (sex determination sexual dimorphism, humpback whale)
- SP 48 (life history, distribution, resource management, Pacific herring, Pac. coast, Canada)
- B 202 (synopsis, species, shrimps, NE Pac.)
- T 930 (long term changes, size distribution, age composition, chum salmon, NE Pac.)
- 944 (population structure, age composition, body size, chinook salmon, NE Pac.)
- 956 (foreign fishing, monitoring, fishery management, marine fishes, B.C. coast)
- 961 (catch/effort, catch statistics, groundfish fisheries, NE Pac.)
- D 185 (stock assessment, quota regulations, groundfish, NE Pac.)
- 208 (stock assessment, quota regulations, groundfish, NE Pac.)
- S 2693 (catch statistics, literature reviews, gray whale, E Pac.)
- 2695 (phylogeny, paleontology, aquatic mammals, NE Pac.)
- 2712 (eutrophication, physical factors, coastal zone, NE Pac.)
- Pagophilus groenlandicus* (see Seal, harp)
- Paleolimnology
- B 206 (environmental impact, long term changes, Bay of Quinte, L. Ontario)
- Paleontology
- S 2695 (aquatic mammals, NE Pac.)
- Panagrellus* (see Nematoda)
- Pandalus borealis* (see Shrimp, northern pink)
- montagu* (see Shrimp, striped pink)
- Fandeidae
- B 204 (taxonomy, B.C., Puget Sound)
- Pangasius* (*Pangasius sutchi*)
- T 948 (cryobiology, gametes, Thailand)
- Pangasius sutchi* (see *Pangasius*)
- Paralithodes camtschatica* (see Crab, Alaska king)
- Parasites; Parasitism
- J 37(5) : 812 (*Haematractidium scomberi*, Atlantic mackerel, NW Atl.)
- (10): 1467 (*Trypanosoma murmanensis*, Atlantic cod, Nfld.)
- (11): 1585-2214 (conferences, sea lamprey, Great Lakes, World Waters)
- (11): 1981 (scarring, powan, European river lamprey, Loch Lomond, Scotland)
- (11): 2021 (lake whitefish, sea lamprey, L. Ontario)
- (11): 2159 (growth, food consumption, mathematical models, sea lamprey, Great Lakes)
- B 202 (shrimps, NE Pac.)
- M 1529 (*Ceratomyxa shasta*, chinook salmon, McGregor R., B.C.)
- S 2724 (indicator species, stock identification, Atlantic salmon, Greenland)
- Parasudis truculenta* (see Greeneye, longnose)
- Parophrys vetulus* (see Sole, English)
- Pasiphaea tarda* (see *Pasiphaeid*, crimson)
- Pasiphaeid*, crimson (*Pasiphaea tarda*)
- B 202 (new records, NE Pac.)
- Passamaquoddy Bay, N.B.
- T 901 (potential oil spills, environmental effects)
- 940 (manuals, population characteristics, invertebrate larvae)
- S 2734 (polychlorinated biphenyls, bioaccumulation, sediments, sandworm, sand shrimp)
- Pathogens
- M 1529 (*Ceratomyxa shasta*, chinook salmon, McGregor R., B.C.)
- S 2690 (*Aerococcus viridans*, gaffkemia, American lobster)
- 2725 (*Aeromonas hydrophila*, biosynthesis, polysaccharides)
- PCBs (see Polychlorinated biphenyls)
- Pearlfish (*Echiodon* sp.)
- J 37(1) : 49 (new record, Scotian Shelf)
- Penaeus aztecus* (see Shrimp, brown)
- duorarum* (see Shrimp, pink)
- Pennsylvania State, USA
- J 37(6) : 937 (thermal pollution, environmental impact, zooplankton, Conowingo Pond)
- Perca flavescens* (see Perch, yellow)
- Perch, Pacific ocean (*Sebastes alutus*)
- M 1570 (stock assessment, potential yield, foreign fishing, Queen Charlotte Sound, B.C.)
- D 208 (stock assessment, quota regulations, NE Pac.)
- Perch, yellow (*Perca flavescens*)
- J 37(1) : 10 (juveniles, predators, walleye, Oneida L., N.Y.)
- (2) : 225 (juveniles, mortality, winter)
- (4) : 679 (phosphorus, food absorption, nutritional requirements)

- (7) : 1140 (population structure, biological data, mathematical models, Lochaber L., N.S.)
- (10) : 1540 (phosphorus, kinetics, ecosystems, L. Memphremagog, Que.-Vt.)
- D 201 (catch/effort, experimental fishing, reservoirs, Southern Indian L., Man.)
- Percopsis omiscomaycus* (see Trout-perch)
- Periphyton
- J 37(3) : 355 (growth, acidification, Experimental Lakes Area, NW Ont.)
- Peristodion miniatum* (see Searobin, armored)
- Perspectives
- J 37(1) : 130 (river continuum concept)
- (5) : 877 (ecology, variations, environmental effects, phytoplankton)
- (7) : 1196 (resource management, environmental protection, environmental legislation, Great Lakes)
- (8) : 1321 (sport fishing, fishery economics, evaluation, Canada)
- Pest control
- J 37(11) : 2081 (system analysis, predator control, sea lamprey, Great Lakes)
- (11) : 2108 (lamprey control, sterilization, program evaluation, sea lamprey, Great Lakes)
- Pesticides
- J 37(4) : 632 (diflubenzuron, bioaccumulation, food, brown bullhead, black crappie)
- (9) : 1450 (organophosphates, cholinesterase inhibitors, toxicity, rainbow trout)
- T 906 (fenitrothion, pollution detection, analytical techniques, bivalve molluscs)
- S 2700 (fenitrothion, volatility, fresh water)
- 2704 (aminocarb, nonylphenol, bioaccumulation, excretion, blue mussel)
- 2705 (aminocarb, nonylphenol, lethal limits, Atlantic salmon, freshwater clam, sand shrimp)
- 2717 (persistence, pollution effects, ponds)
- Petroleum (see Pollutants; Pollution; Pollution effects)
- Petromyzon marinus* (see Lamprey, sea)
- Petromyzontidae (see Lampreys)
- pH; pH effects (see also Acidification; Acidity)
- J 37(3) : 364 (survival, calcium, crayfish, Experimental Lakes Area, NW Ont.)
- (4) : 703 (water analysis, Gulf of St. Lawrence)
- (5) : 770 (hatching, eggs, Atlantic salmon)
- (6) : 1035 (acclimation, embryos, juveniles, Atlantic salmon, rainbow trout)
- T 950 (bibliographies, environmental effects, World Inland Waters)
- Phenotypes; Phenotypic variations
- J 37(7) : 1149 (isozymes, statistical analysis, electrophoresis)
- S 2655 (lipids, dry matter, rainbow trout)
- 2729 (isoenzymes, dehydrogenases, chars)
- Pheromones
- J 37(11) : 2123 (population control, sea lamprey)
- Phoca hispida* (see Seal, ringed)
- vitulina* (see Seal, harbor)
- Phosphorus; Phosphorus compounds
- J 37(2) : 290 (limnological data, information handling, box plots) (Corrections on J 37(8): 1333)
- (3) : 472 (orthophosphate, measuring, analytical errors, Experimental Lakes Area, NW Ont.)
- (3) : 479 (orthophosphate, seasonal variations, radiochemical analysis, Experimental Lakes Area, NW Ont.)
- (4) : 664 (distribution, availability, *Chlorella*, N.Z.)
- (4) : 679 (phosphorus cycle, food absorption, nutritional requirements, yellow perch, L. Memphremagog, Que.-Vt.)
- (5) : 817 (lead-210 dating, sediment analysis, Bob L., Ont.)
- (9) : 1439 (water quality, land use, mathematical models, Higgins L., Mich.)
- (10) : 1540 (kinetics, ecosystems, yellow perch, L. Memphremagog, Que.-Vt.)
- Photoperiodicity
- J 37(4) : 600 (gill ATP, growth, chinook salmon)
- Photosynthesis
- J 37(3) : 464 (carbon, gas exchange, Experimental Lakes Area, NW Ont.)
- (4) : 707 (molybdenum, phytoplankton, Castle L., Calif.)
- (6) : 1028 (phytoplankton, fluorescence, analytical techniques, Gulf of St. Lawrence, Gulf of Guinea)
- Photosynthetic pigments
- J 37(1) : 111 (seston, phosphorus, chlorophylls, freshwater lakes)
- Phylogeny
- J 37(11) : 1595 (lampreys, World Waters)
- S 2679 (Chironomidae)
- 2695 (aquatic mammals, NE Pac.)
- Physeter catodon* (see Whale, sperm)

Physicochemical properties

- J 37(5) : 823 (hydrodynamics, spring transition, L. Ontario)
 M 1574 (oceanographic data, Queen Charlotte Sound, Hecate Strait, Dixon Entrance, B.C.)
 1575 (water analysis, morphology, Heming L., Man.)

Physiculus fulvus (Moridae)

- J 37(1) : 49 (new record, Scotian Shelf)

Physiology (see also Fish physiology)

- J 37(9) : 1426 (enzymatic activity, digestion, zooplankton)

Phytobenthos

- J 37(1) : 1 (ecological associations, feeding behavior, *Eogammarus confervicolus*, Fraser R. estuary, B.C.)

Phytoplankton (see also Diatoms; also Primary production)

- J 37(3) : 442 (nutrient deficiency, physiological indicators, Experimental Lakes Area, NW Ont.)
 (3) : 488 (nitrogen fixation, analytical techniques, Experimental Lakes Area, NW Ont.)
 (3) : 494 (nitrogen fixation, Experimental Lakes Area, NW Ont.)
 (4) : 707 (photosynthesis, nitrate uptake, molybdenum, Castle L., Calif.)
 (4) : 729 (chemical extraction, chlorophylls)
 (5) : 877 (ecology, variations, environmental effects)
 (6) : 1028 (fluorescence, photosynthesis, analytical techniques, Gulf of St. Lawrence, Gulf of Guinea)
 (8) : 1317 (flocculation, hydroextraction)
 (10) : 1476 (geographical distribution, coastal zone, B.C.)
 T 917 (check lists, biomass, L. Huron)
 M 1585 (pollution effects, acidification, Experimental Lakes Area, NW Ont.)
 D 200 (primary production, carbon, chlorophylls, Experimental Lakes Area, NW Ont.)
 S 2659 (variations, abundance, San Diego, Calif.)
 2670 (growth, ATP, analytical techniques, Sargasso Sea)
 2677 (primary production, phytoplankton culture, measuring)
 2713 (growth, purines, nitrogen cycle)

Phytoplankton culture

- J 37(3) : 424 (environmental effects, Experimental Lakes Area, NW Ont.)
 (3) : 434 (hypolimnion, environmental effects, Experimental Lakes Area, NW Ont.)

Pike, northern (*Esox lucius*)

- J 37(9) : 1449 (organoleptic properties, chemical compounds, Cedar L., Man.)

- (9) : 1454 (activity patterns, circadian rhythms, swimming speeds, Lac Ste. Anne, Alta.)
 (10) : 1573 (heavy metals, bioaccumulation, lakes, Flin Flon, Man.)
 M 1510 (fishery resources, Great Bear R., N.W.T.)
 1553 (stock assessment, fishery management, sport fishing statistics, Mackenzie R., N.W.T.)
 D 186 (catch/effort, biological data, Mosquito Creek, N.W.T.)
 195 (mercury, bioaccumulation, pollution monitoring, Churchill-Rat-Burntwood, Nelson R. systems, Man.)
 201 (catch/effort, experimental fishing, reservoirs, Southern Indian L., Man.)

Pimephales promelas (see Minnow, fathead)

Pinnipedia

- S 2695 (paleontology, phylogeny, NE Pac.)

Pipehorse (*Amphelikturus dentriticus*)

- J 37(1) : 49 (new records, Scotian Shelf)

Pituitary gland

- J 37(11) : 1680 (evolution, lampreys)

Placopecten magellanicus (see Scallop, sea)Plaice, American (*Hippoglossoides platessoides*)

- T 905 (spawning, spawning grounds, Nfld., Labrador)
 CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
 80/36 (stock assessment, landing statistics, catch/effort, ICNAF Div. 4VWX, NW Atl.)
 80/41 (stock assessment, landing statistics, catch/effort, NAFO Div. 4T, NW Atl.)
 30/53 (stock assessment, catch statistics, ICNAF Subdiv. 3Ps, NW Atl.)
 80/58 (stock assessment, catch statistics, catch/effort, ICNAF Subarea 2, Div. 3K, NW Atl.)

Plankton (see also Ichthyoplankton; also Phytoplankton; also Zooplankton)

- J 37(3) : 403 (cadmium, pollution effects, Experimental Lakes Area, NW Ont., L. Michigan)
 (10) : 1476 (sampling, coastal zone, B.C.)
 T 934 (biomass, St. Georges Bay, N.S.)

Plankton collecting devices

- J 37(4) : 606 (bongo nets, mesh size, towing speed)
 (4) : 722 (BIONESS, gear construction)
 T 903 (BIONESS, gear construction)

Poisons (biological)

- J 37(12) : 2262 (food chains, zooplankton, fish kills, *Gonyaulax*, Atlantic herring, Bay of Fundy)

- Pollachius virens* (see Pollock) 2675 (sublethal effects, marine organisms)
- Pollichthys maui* (Gonostomatidae) 2682 (trace organics, water analysis, analytical techniques)
- J 37(1) : 49 (new record, Scotian Shelf) 2691 (aromatics, bioaccumulation, measuring, Atlantic salmon)
- Pollock (*Pollachius virens*) 2701 (metals, indicator species, water milfoil, Flin Flon, Man.)
- CRD 80/1 (stock assessment, population characteristics, landing statistics, ICNAF Div. 4VWX-5-6, NW Atl.) 2717 (pesticides, persistence, ponds)
- 2731 (organic compounds, sediment analysis)
- Pollock, walleye (*Theragra chalcogramma*) 2734 (polychlorinated biphenyls, bioaccumulation, sediments, sandworm, sand shrimp, Passamaquoddy Bay, N.B.)
- (Alaska pollock) 2735 (chemical pollutants, fate, experimental data)
- J 37(7) : 1093 (population genetics, biochemistry, population structure, Bering Sea, Gulf of Alaska) OD 1 (ocean dumping, sediment sampling, sediment analysis)
- (9) : 1458 (storage effects, chilled products, organoleptic properties) 2 (ocean dumping, annotated bibliographies, research programs)
- T 961 (catch/effort, catch statistics, NE Pac.) 3 (ocean dumping, legislation, literature reviews)
- M 1572 (fishery surveys, echo surveys, stock assessment, Dixon Entrance, B.C.)
- D 173 (quantitative distribution, biological data, fishery surveys, Dixon Entrance, Hecate Strait, Queen Charlotte Sound, Strait of Georgia, B.C.)
- 187 (stock assessment, fishery surveys, Dixon Entrance, B.C.)
- 206 (stock assessment, fishery surveys, Vancouver I., B.C.)
- 208 (stock assessment, quota regulations, NE Pac.)
- Pollutants; Pollution; Pollution effects)
- J 37(2) : 248 (pollution effects, pulp mill effluents, algal settlements)
- (3) : 403 (pollution effects, cadmium, plankton, Experimental Lakes Area, NW Ont., L. Michigan)
- (4) : 647 (heavy metals, aquatic insects, indicator species, Chironomidae, Ohio)
- (5) : 770 (acidification, eggs, Atlantic salmon)
- (6) : 937 (thermal pollution, environmental impact, zooplankton, Conowingo Pond, Pa.)
- (7) : 1167 (long-term effects, toxicity tests, *Panagrellus redivivus*)
- (10) : 1573 (heavy metals, bioaccumulation, northern pike, white sucker, lakes, Flin Flon, Man.)
- SP 44 (chemical pollutants, freshwater organisms, toxicity tests)
- T 901 (potential oil spills, Passamaquoddy Bay, N.B.)
- 906 (pollution detection, fenitrothion, bivalve molluscs)
- 962 (acidification, freshwater lakes, N.B.)
- M 1575 (heavy metals, Heming L., Man.)
- 1585 (pollution effects, acidification, phytoplankton, Experimental Lakes Area, NW Ont.)
- S 2669 (chemical pollutants, toxicity tests, brook trout)
- Pollution monitoring
- D 172 (Quatsino Sound, Neroutsos Inlet, B.C.)
- 195 (mercury, bioaccumulation, northern pike, walleye, lake whitefish, Churchill-Rat-Burntwood, Nelson R. systems, Man.)
- 204 (bacteria, Atlantic oyster, Maritime Provinces 1979)
- S 2675 (sublethal effects, marine organisms)
- 2681 (fallout, metals, smelters, Flin Flon, Man.)
- 2732 (terbutryn, degradation, aquatic environment)
- Polychaeta (see also names of species)
- J 37(1) : 20 (new species, new records, taxonomy, Terebellidae, NE Pac.)
- (2) : 286 (chromosomes, karyotypes, cytological techniques, *Neanthes arenaceodentata*)
- (7) : 1130 (submerged cages, interspecific relationships, sedimentation, Calif.)
- (8) : 1225 (microbiological analysis, chromosomes, genetic toxicants, *Neanthes arenaceodentata*)
- T 920 (new records, identification keys, Bay of Fundy)
- 940 (manuals, population characteristics, invertebrate larvae, Passamaquoddy Bay, N.B.)
- Polychlorinated biphenyls (PCBs)
- S 2699 (Aroclor, sediment-water interface, estuaries)
- 2734 (bioaccumulation, sediments, sandworm, sand shrimp, Passamaquoddy Bay, N.B.)
- Polyipnus asteroides* (Sternoptychidae)
- J 37(1) : 49 (rare record, Scotian Shelf)
- Polymorphism
- J 37(12) : 2228 (population genetics, shortjaw cisco, L. Superior)

Polydora (see Chironomidae)

Polysaccharides

- S 2725 (glucans, biosynthesis, *Aeromonas hydrophila*)

Pomoxis nigromaculatus (see Crappie, black)*Pontinus* sp? (Scorpaenidae)

- J 37(1) : 49 (new record, Scotian Shelf)

Pontoporeia hoyi

- J 37(2) : 177 (predators, alewife, L. Michigan)

Population characteristics

- J 37(11): 1861 (variations, sea lamprey, Great Lakes)
- T 904 (sea scallop, Northumberland Strait, Gulf of St. Lawrence)
- 922 (fishery surveys, biological data, freshwater fishes, Lower Churchill R., Labrador)
- 932 (system analysis, American lobster, NW Atl.)
- 940 (manuals, invertebrate larvae, Polychaeta, Passamaquoddy Bay, N.B.)
- 945F (Atlantic herring, Gaspé peninsula, Que.)
- M 1552 (aquatic mammals, Baffin I., N.W.T.)
- S 2680 (haddock, St. Pierre Bank, NW Atl.)
- CRD 80/1 (stock assessment, pollock, ICNAF Div. 4VWX-5-6, NW Atl.)
- 80/2 (stock assessment, haddock, ICNAF Div. 4X, NW Atl.)
- 80/20 (juveniles, Atlantic herring, ICNAF Div. 4X, NW Atl.)
- 80/22 (stock assessment, Atlantic cod, ICNAF Div. 4T, 4Vn, NW Atl.)
- 80/24 (landing statistics, stock assessment, Greenland halibut, Gulf of St. Lawrence)
- 80/27 (stock assessment, Atlantic cod, ICNAF Div. 3Pn, 4RS, NW Atl.)
- 80/48 (stock assessment, Atlantic cod, ICNAF Subdiv. 3Ps, NW Atl.)
- 80/51 (Atlantic herring, W Nfld.)
- 80/52 (Atlantic herring, E Nfld.)
- 80/54 (Atlantic herring, Gulf of St. Lawrence)
- 80/55 (snow crab, Cape Breton, N.S.)
- 80/62 (stock assessment, statistical analysis, redfishes, NW Atl.)
- 80/65 (stock assessment, Atlantic mackerel, NAFO SA 3-6, NW Atl.)

Population control

- J 37(11): 1780 (historical account, sea lamprey, L. Huron, L. Michigan, L. Superior)
- (11): 1802 (historical account, sea lamprey, L. Erie, L. Ontario)
- (11): 1886 (environmental effects, fish kill, sea lamprey, Great Lakes)
- (11): 2123 (pheromones, sea lamprey)
- (11): 2175 (predators, program evaluation, sea lamprey, Great Lakes)

Population density

- J 37(4) : 693 (bioacoustics, euphausiids, Gulf of St. Lawrence)
- (11): 1835 (chemical control, sea lamprey, Great Lakes)
- M 1576 (fishery surveys, abalone, Lotbinière Bay, Emily Carr Inlet, B.C.)
- D 163 (freshwater fishes, juveniles, Atlantic salmon, N.S.)
- 166 (freshwater fishes, Restigouche R., N.B.)
- 170 (freshwater fishes, Miramichi R., N.B.)
- 178 (electrofishing, freshwater fishes, juveniles, Atlantic salmon, Saint John R. system, N.B.)
- 182 (zooplankton, Experimental Lakes Area, NW Ont.)

Population dynamics

- J 37(2) : 255 (growth, recruitment, exploitation, lake whitefish, N.W.T.)
- (6) : 1012 (recruitment, bioenergetics)
- (8) : 1254 (bioenergetics, food conversion, *Chironomus plumosus*, Bay of Quinte, L. Ontario)
- (11): 1835 (chemical control, sea lamprey, Great Lakes)
- (11): 1872 (endemic species, lamprey control, L. Superior)
- (11): 2039 (lake whitefish, predator control, sea lamprey, L. Huron)
- (11): 2047 (lake trout, lamprey control, L. Michigan)
- (11): 2057 (recruitment, lamprey control, lake trout, L. Superior)
- (11): 2074 (mortality, survival, lake trout, Gull Island Reef, L. Superior)
- (11): 2133 (mathematical models, exploitation, predator control, sea lamprey, lake trout, Great Lakes)
- T 959 (stock assessment, Pacific herring, B.C.)
- 960 (stock assessment, Pacific herring, Barkley Sound, B.C.)
- M 1535 (environmental effects, barnacle, Squamish R. estuary, B.C.)
- S 2664 (sexual maturity, spawning, haddock, St. Pierre Bank, NW Atl.)
- 2680 (haddock, St. Pierre Bank, NW Atl.)
- 2728 (literature reviews, Arctic char)
- CRD 80/3 (landing statistics, American lobster, Northumberland Strait, Gulf of St. Lawrence)
- 80/17 (fecundity, American lobster, Placentia Bay, Nfld.)
- 80/20 (juveniles, Atlantic herring, ICNAF Div. 4X, NW Atl.)
- 80/23 (production models, redfishes)
- 80/31 (redfishes, Scotian Shelf)
- 80/34F (Greenland halibut, Gulf of St. Lawrence)
- 80/46 (Atlantic cod, ICNAF Div. 4X, NW Atl.)
- 80/60 (stock assessment, redfishes, Gulf of St. Lawrence)

- 80/61 (stock assessment, haddock, Scotian Shelf, ICNAF Div. 4VW, NW Atl.)
- 80/62 (stock assessment, statistical analysis, redfishes, NW Atl.)
- Population genetics
- J 37(5) : 775 (environmental effects, blue mussel, Maritime Provinces)
- (5) : 783 (lake whitefish, L. Michigan)
- (5) : 873 (size-limit regulations, growth, brown trout)
- (7) : 1093 (biochemistry, population structure, walleye pollock, Bering Sea, Gulf of Alaska)
- (8) : 1236 (stock identification, proteins, electrophoresis, sockeye salmon, Cook Inlet, Alaska)
- (11) : 1630 (isoenzymes, electrophoresis, sea lamprey)
- (12) : 2228 (taxonomy, shortjaw cisco, L. Superior)
- CRD 80/30 (taxonomy, blackbelly rosefish, redfishes, NAFO Div. 4VWX, NW Atl.)
- Population number
- J 37(11) : 1861 (variations, chemical control, sea lamprey, Great Lakes)
- (11) : 1960 (larvae, European river lamprey, rivers, Bothnian Bay, Finland)
- T 863 (environmental effects, white whale, Mackenzie R. estuary)
- S 2710 (biological surveys, harbor seal, grey seal, Norway)
- Population structure
- J 37(2) : 143 (spawning behavior, environmental conditions, year-class success, striped bass, Potomac R. estuary, Md.)
- (6) : 945 (size-maturity, numerical analysis, American lobster, Nfld.)
- (7) : 1093 (biochemistry, population genetics, walleye pollock, Bering Sea, Gulf of Alaska)
- (7) : 1140 (mathematical models, Leslie matrix, biological data, yellow perch, Lochaber L., N.S.)
- (12) : 2358 (size distribution, echo surveys, sperm whale, NW Atl.)
- T 944 (age composition, body size, chinook salmon, NE Pac.)
- M 1576 (fishery surveys, abalone, Lotbinière Bay, Emily Carr Inlet, B.C.)
- D 173 (walleye pollock, Dixon Entrance, Hecate Strait, Queen Charlotte Sound, Strait of Georgia, B.C.)
- 177 (length, age composition, rock sole, Butterworth-Warren Area, Hecate Strait, B.C.)
- 188 (walleye, Hay R., N.W.T.)
- 190 (length, age composition, landing statistics, English sole, Hecate Strait, B.C.)
- 198 (Mesidotea spp., Beaufort Sea)
- 199 (biological data, Arctic grayling, Kakisa R., N.W.T.)
- S 2718 (size distribution, food availability, fishing mortality, lake trout)
- CRD 80/34F (Greenland halibut, Gulf of St. Lawrence)
- 80/35 (witch flounder, St. Pierre Bank, NW Atl.)
- Porpoises
- S 2696 (fishery management, neuroanatomy, social behavior)
- Potential resources
- T 942 (commercial species, fishery development, squids, B.C.)
- I 114 (fishery development, green sea urchin, St. Lawrence R.)
- 117 (fishery development, economics, northern pink shrimp, NW Atl., Canada)
- Powan (*Coregonus lavaretus*) (whitefish)
- J 37(11) : 1981 (parasitism, scarring, European river lamprey, Loch Lomond, Scotland)
- Power plants
- J 37(7) : 1101 (environmental effects, hydrologic cycle, seasonal variations, James Bay, Hudson Bay)
- T 952 (literature reviews, downstream migrations, juveniles, Atlantic salmon)
- M 1459 (fishways, tagging, spawning migrations, chinook salmon, Whitehorse Rapids Dam, Yukon R., Y.T.)
- 1541 (fishways, mortality, migrations, Atlantic salmon, Malay Falls, N.S.)
- D 171 (fishways, census, anadromous species, Atlantic salmon, Saint John R. system, N.B.)
- 181 (fishways, census, anadromous species, Atlantic salmon, Mactaquac Dam, Saint John R., N.B.)
- Prairie Provinces (see also Alberta; Manitoba)
- M 1546 (resource development, environmental impact)
- Predation; Predators
- J 37(1) : 10 (walleye, yellow perch, Oneida L., N.Y.)
- (1) : 120 (Coelenterata, Strait of Georgia, B.C.)
- (2) : 177 (alewife, opossum shrimp, Pontoporeia, L. Michigan)
- (4) : 561 (fishermen, Indians, fishery management, Pacific salmon, B.C.)
- (6) : 909 (zooplankton, selective feeding, opossum shrimp)
- (7) : 1063 (food conversion, larvae, Atlantic herring)
- (8) : 1314 (fish larvae, alewife, Claytor L., Va.)
- (11) : 1585-2214 (conferences, sea lamprey, Great Lakes, World Waters)

- (11): 1924 (swordfish, striped bass, sea lamprey, NW Atl., Atlantic salmon, sea lamprey, Saint John R., N.B.)
- (11): 1974 (goosander, burbot, European river lamprey, N Sweden)
- (11): 1989 (classification, lesions, sea lamprey, lake trout, Great Lakes)
- (11): 2007 (ciscoes, lake whitefish, sea lamprey, Great Lakes)
- (11): 2047 (lake trout, sea lamprey, L. Michigan)
- (11): 2052 (mortality, lake trout, sea lamprey, Green Bay, Wis.)
- (11): 2063 (mortality, lake trout, sea lamprey, L. Superior)
- (11): 2074 (lake trout, sea lamprey, Gulf Island Reef, L. Superior)
- (11): 2146 (mortality, lake whitefish, sea lamprey, L. Huron)
- (11): 2151 (mortality, lake trout, sea lamprey, Cayuga L., N.Y.)
- (11): 2175 (population control, program evaluation, sea lamprey, Great Lakes)
- (11): 2193 (interspecific relationships, sea lamprey, Great Lakes)
- (12): 2254 (feeding behavior, food variability, ringed seal, Alaska)
- (12): 2294 (selective feeding, prey vulnerability, bluegill, pumpkinseed)
- T 954 (ecosystems, American lobster, green sea urchin, kelp, St. Margaret's Bay, N.S.)
- M 1561 (polar bear, ringed seal, Baffin I., N.W.T.)
- S 2685 (predator-prey systems, mathematical models, fishery management)
- 2686 (starfish, sea scallop, larvae, Nfld.)
- CRD 80/37 (food consumption, Atlantic cod, Gulf of St. Lawrence)
- Predator control
- J 37(11): 1835 (lampricides, population density, population dynamics, sea lamprey, Great Lakes)
- (11): 1851 (lampricides, spawning migrations, streams, sea lamprey, L. Superior)
- (11): 1861 (lampricides, population control, sea lamprey, Great Lakes)
- (11): 1872 (lampricides, population control, sea lamprey, L. Superior)
- (11): 1886 (environmental effects, population control, sea lamprey, Great Lakes)
- (11): 1895 (lamprey control, environmental effects, aquatic organisms, Great Lakes)
- (11): 2039 (predators, sea lamprey, Great Lakes)
- (11): 2057 (sea lamprey, L. Superior)
- (11): 2081 (pest control, system analysis, sea lamprey, Great Lakes)
- (11): 2093 (environmental legislation, sea lamprey)
- (11): 2103 (larvicides, toxicity, sea lamprey, Great Lakes)
- (11): 2108 (pest control, sterilization, program evaluation, sea lamprey, Great Lakes)
- (11): 2118 (barriers, spawning migrations, sea lamprey, Great Lakes)
- (11): 2123 (pheromones, population control, sea lamprey)
- (11): 2133 (population dynamics, lake trout, sea lamprey, Great Lakes)
- (11): 2169 (fishery economics, program evaluation, sea lamprey, Great Lakes)
- (11): 2197 (fishery management, program evaluation, sea lamprey, Great Lakes)
- (11): 2202 (proposed research fishery management, sea lamprey, Great Lakes)
- Preservation (fishery products)
- T 898 (chilling storage, quality control, short-finned squid)
- 921 (preservatives, roe, Pacific herring, B.C.)
- Primary production (see also Phytoplankton)
- J 37(3): 454 (carbon cycle, radioactive tracers, Experimental Lakes Area, NW Ont.)
- (3): 513 (phytoplankton, predictions, mathematical models, Experimental Lakes Area, NW Ont.)
- (3): 523 (phytoplankton, emergence, Diptera, Experimental Lakes Area, NW Ont.)
- (5): 834 (metabolism, rivers, McKenzie R., Oreg.)
- (10): 1531 (oxygen consumption, hypolimnion, L. Erie)
- (12): 2300 (humus, reservoirs, lakes, Man.)
- T 924 (nursery grounds, sockeye salmon, lakes, B.C.)
- 934 (phytoplankton, St. Georges Bay, N.S.)
- D 200 (phytoplankton, carbon, chlorophylls, Experimental Lakes Area, NW Ont.)
- S 2677 (phytoplankton culturing, measuring)
- Prionotus carolinus* (see Searobin, northern)
- Processing fishery products
- J 37(6): 1458 (storage effects, organoleptic properties, chilled products, walleye pollock)
- T 900 (drying, short-finned squid)
- 913 (minced products, temperature effects, freezing storage, cusk)
- 921 (preservation, quality control, roe, Pacific herring, B.C.)
- M 1544 (tag recovery, Pacific herring)
- I 109 (quality control, Pacific herring, Alert Bay, B.C.)

- 114 (green sea urchin, St. Lawrence R.)
S 2674 (minced products, proteins)
- Production (biological)
J 37(4) : 567 (toxicity, heavy metals, Copepoda)
(8) : 1229 (catch/effort, mathematical models)
(8) : 1276 (mathematical models, potential yield, methodology)
(8) : 1284 (Schaefer model, catch/effort, analytical techniques)
(8) : 1295 (toxicity, metal interactions, Copepoda)
(9) : 1373 (stream flow, hatcheries, coho salmon, Puget Sound)
T 897 (biomass, ecological succession, zooplankton, Vancouver I., B.C.)
947 (stock assessment, abalone, B.C.)
M 1562 (incubation, chum salmon, Inches Creek, Fraser R. system, B.C.)
CRD 80/23 (mathematical models, population dynamics, redfishes)
80/25 (production models, stock assessment, redfishes, ICNAF Subarea 2, Div. 3K, NW Atl.)
80/26 (production models, stock assessment, catch/effort, redfishes, ICNAF Div. 3B, NW Atl.)
80/28 (production models, catch/effort, stock assessment, Atlantic cod, ICNAF Subdiv. 3Pn, Div. 4R, 4S, NW Atl.)
80/29 (production models, catch/effort, stock assessment, Atlantic cod, ICNAF Subdiv. 3Ps, NW Atl.)
80/63 (production models, stock assessment, catch/effort, Atlantic cod, ICNAF Div. 2GH, NW Atl.)
- Prosopium cylindraceum* (see Whitefish, round)
- Proteins
J 37(8) : 1236 (electrophoresis, biogenetic markers, stock identification, sockeye salmon, Cook Inlet, Alaska)
S 2674 (processing fishery products, quality control, minced products)
- Pseudopleuronectes americanus* (see Flounder, winter)
- Puget Sound, Pacific Ocean
J 37(9) : 1373 (production, stream flow, hatcheries, coho salmon)
B 204 (taxonomy, geographical distribution, Hydromedusae)
- Pumpkinseed (*Lepomis gibbosus*)
J 37(9) : 1411 (sympatric populations, ecological distribution, food resources, Mich.)
(12) : 2294 (selective feeding, predation, prey vulnerability)
- Puntius (*Puntius gonionotus*)
T 948 (cryobiology, gametes, Thailand)
- Puntius gonionotus* (see Puntius)
- Purines
S 2713 (nitrogen cycle, growth, phytoplankton)
- Q
- Quahog, northern (*Mercenaria mercenaria*) (hard clam)
J 37(12) : 2318 (aromatics, bioaccumulation, food chains)
- Quality: Quality assurance; Quality control
T 898 (storage effects, chilling, short-finned squid)
900 (drying, preservation, short-finned squid)
902 (biochemical analysis, short-finned squid, methodology, Canada)
913 (freezing storage, minced products, cusk)
916 (organoleptic properties, frozen products, cured products, harp seal, Nfld.)
921 (processing, preservation, roe, Pacific herring, B.C.)
M 1555 (lake whitefish, water reservoirs, Southern Indian L., Man.)
I 109 (ponding, fish handling, processing, Pacific herring, Alert Bay, B.C.)
S 2674 (minced products, processing, proteins)
2716 (agar, morphotypes, *Gracilaria* spp. B.C.)
- Quantitative distribution (see Distribution)
- Quebec (Province), Canada (see also Memphremagog, Lake)
J 37(1) : 66 (subpopulation, stock identification, Atlantic herring, Gaspé peninsula)
T 945F (population characteristics, landing statistics, fishing operations, Atlantic herring, Gaspé peninsula)
- Queen Charlotte Islands; Queen Charlotte Sound; Queen Charlotte Strait, B.C.
M 1570 (stock assessment, potential yield, foreign fishing, Pacific ocean perch, Queen Charlotte Sound)
1574 (oceanographic data, physicochemical properties, Queen Charlotte Sound)
D 173 (fishery surveys, biological data, quantitative distribution, walleye pollock, Queen Charlotte Sound)
191 (hydrographic surveys, G. B. Reed groundfish cruise no. 79-6, Queen Charlotte Sound)
193 (exploratory fishing, longlining, rockfishes, Queen Charlotte Is.)
215 (exploratory fishing, catch statistics, stock assessment, rockfishes, Queen Charlotte Is.)

- 216 (exploratory fishing, catch statistics, stock assessment, rockfishes, Queen Charlotte Sound)
- 218 (exploratory fishing, catch statistics, stock assessment, rockfishes, Queen Charlotte Is.)
- I 116 (catch statistics, catch composition, body weight, albacore, Queen Charlotte Sound)

R

Rachycentron canadum (see Cobia)

Radioactive tracers

- J 37(3) : 378 (fate, sediment-water interface, Experimental Lakes Area, NW Ont.)
- (3) : 454 (carbon cycle, primary production, Experimental Lakes Area, NW Atl.)

Radioactive wastes

- OD 3 (ocean dumping, legislation, literature reviews)

Radiochemical separations

- J 37(3) : 479 (radiochemical analysis, orthophosphate, Experimental Lakes Area, NW Ont.)

Raja radiata (see Skate, thorny)

Rapeseed (*Brassica* spp.)

- S 2666 (phospholipids, phytin, chromatographic techniques)

Rare species

- J 37(1) : 49 (marine fishes, fish larvae, Scotian Shelf)

Ratfish (*Hydrolagus colliei*)

- D 187 (fishery surveys, Dixon Entrance, B.C.)

Rearing

- D 169 (fish culture, juveniles, coho salmon, Rosewall Creek, Vancouver I., B.C.)
- I 115 (cage culture, fish ponds, rainbow trout, Scotts Pond, Nfld.)

Recirculating systems

- J 37(5) : 794 (seawater, ammonia, analytical techniques)
- T 946 (excretory products, growth, juveniles, coho salmon)
- S 2697 (experimental research, shellfish culture, American lobster)

Records, new (see New records)

Recreation

- J 37(8) : 1321 (sport fishing, fishery economics, evaluation, Canada)
- M 1538 (resident boating, baseline studies, Strait of Georgia, B.C.)

Recruitment

- J 37(2) : 255 (exploitation, lake whitefish, N.W.T.)
- (4) : 576 (predictions, marking, fishery management)
- (6) : 1012 (population dynamics, bioenergetics)
- (12) : 2323 (stable cycles, mathematical models, Dungeness crab, Calif.)

Red tides

- J 37(12) : 2262 (fish kills, *Gonyaulax*, Atlantic herring, Bay of Fundy)

Redfishes (*Sebastes* spp.) [Atl.]

- T 905 (spawning, spawning grounds, Nfld., Labrador)
- CRD 80/18 (fishery surveys, biomass, stock assessment, ICNAF Subarea 2, St. Lawrence)
- 80/23 (production models, population dynamics)
- 80/25 (production models, stock assessment, ICNAF Subarea 2, Div. 3K, NW Atl.)
- 80/26 (stock assessment, catch/effort, production models, ICNAF Div. 3Ø, NW Atl.)
- 80/30 (taxonomy, *Sebastes fasciatus*, *S. marinus*, *S. mentella*, NAFO Div. 4VWX, NW Atl.)
- 80/31 (catch statistics, population dynamics, ecological distribution, Scotian Shelf)
- 80/32 (age, growth, removals, Scotian Shelf)
- 80/60 (stock assessment, population dynamics, Gulf of St. Lawrence)
- 80/62 (stock assessment, statistical analysis, population characteristics, NW Atl.)

Reinhardtius hippoglossoides (see Halibut, Greenland)

Relict species

- J 37(12) : 2352 (biogeography, colonization, Dolly Varden, Y.T.)

Reproduction (biology)

- J 37(10) : 1579 (resting eggs, diapause, *Diaptomus leptopus*)
- (11) : 1762 (physiology, lampreys)
- D 198 (*Mesidotea* spp., Beaufort Sea)
- CRD 80/42 (multiple fertilization, spawning, American lobster)

Reproductive behavior

- S 2706 (mating, rock crab)

Reproductive organs

- D 209 (gonad maturation, biological data, Pacific herring, Vancouver I., B.C.)
- S 2679 (female genitalia, morphology, Chironomidae)
- 2702 (female genitalia, taxonomy, Chironomidae)

- CRD 80/7 (gonads, development, Arctic cod, Labrador, Nfld.)
- Research programs
 J 37(3) : 313 (Experimental Lakes Project, evolution, Experimental Lakes Area, NW Ont.)
 (11): 1585-2214 (conferences, predator control, fishery management, sea lamprey, Great Lakes, World Waters) (progress reports, Cetacea, Canada coasts)
 S 2694 (ocean dumping, annotated bibliographies)
 OD 2
- Reservoirs (water)
 J 37(6) : 927 (sampling, funnel traps, emergence, Chironomidae, Southern Indian L., Man.)
 (12): 2300 (primary production, humus, Man.)
 B 205 (impoundments, environmental effects, Canada)
 T 895 (environmental effects, long term changes, variance analysis, Southern Indian L., Man.)
 922 (water quality, Lower Churchill R., Labrador)
 M 1555 (reservoir fisheries, post impoundment, fishing effort, lake whitefish, Southern Indian L., Man.)
 D 201 (experimental fishing, catch/effort, Southern Indian L., Man.)
- Resource availability
 J 37(10): 1565 (diurnal variations, silver hake, NW Atl.)
 S 2665 (diurnal variations, biomass, statistical sampling, witch flounder, NW Atl.)
 CRD 80/14 (stock assessment, northern pink shrimp, ICNAF Div. 2H, 2J, Labrador, Nfld.)
 80/15 (exploratory fishing, northern pink shrimp, striped pink shrimp, Ungava Bay, E Hudson Strait, ICNAF Div. 2G, NW Atl.)
- Resource development
 T 923 (sociological aspects, fishery economics, Pacific salmon, B.C. coast)
 M 1546 (environmental impact, Prairie Provinces, N.W.T., Canada)
- Resource management (see also Fishery management)
 J 37(3) : 313 (research programs, Experimental Lakes Area, NW Ont.)
 (7) : 1196 (environmental protection, environmental legislation, Great Lakes)
 SP 48 (Pacific herring, Pac. coast, B.C.)
 T 954 (American lobster, kelp, St. Margaret's Bay, N.S.)
 D 207 (data centers, Fraser R., B.C.)
- Respiration
 J 37(11): 1711 (oxygen consumption, lampreys)
- Rissa tridactyla* (see Kittiwake, black-legged)
- Roccus saxatilis* (see Bass, striped)
- Rockfish, yellowtail (*Sebastes flavidus*)
 D 208 (stock assessment, quota regulations, NE Pac.)
- Rockfishes (*Sebastes* spp.) [Pac.] (see also names of species)
 T 961 (catch/effort, catch statistics, NE Pac.)
 D 187 (fishery surveys, Dixon Entrance, B.C.)
 193 (exploratory fishing, longlining, Queen Charlotte Is., B.C.)
 206 (fishery surveys, Vancouver I., B.C.)
 215 (exploratory fishing, catch statistics, stock assessment, Queen Charlotte Is., B.C.)
 216 (exploratory fishing, catch statistics, stock assessment, Queen Charlotte Sound, B.C.)
 218 (exploratory fishing, catch statistics, stock assessment, Queen Charlotte Is., Vancouver I., B.C.)
- Roe
 T 921 (processing, preservation, quality control, Pacific herring, B.C.)
 M 1550 (yield predictions, Pacific herring, B.C.)
 I 110 (catch statistics, spawn abundance, Pacific herring, B.C.)
 112 (stock assessment, roe fishery, Pacific herring, B.C.)
 118 (fishery management, spawning seasons, Pacific herring, B.C.)
- Rosefish, blackbelly (*Helicolenus dactylopterus*)
 CRD 80/30 (taxonomy, stock identification, population genetics, NAFO Div. 4VWX, NW Atl.)
- Rotifera
 J 37(1) : 97 (energy flow, simulation, *Brachionus rubens*)
 (4) : 738 (bioaccumulation, benzene, carbon 14, *Brachionus plicatilis*)
- S
- Sablefish (*Anoplopoma fimbria*) (blackcod)
 T 956 (foreign fishing, monitoring, catch/statistics, Pac. coast, Canada)
 961 (catch/effort, catch statistics, NE Pac.)
 D 162 (trap fishing, exploratory fishing, tagging, B.C.)
- Saint John River; Saint John River Estuary; Saint John River System, N.B.
 J 37(11): 1924 (predation, Atlantic salmon, sea lamprey)

- T 939 (survival, juveniles, Atlantic salmon)
- D 171 (census, anadromous species, transplantation, Atlantic salmon)
- 178 (water quality, hatcheries, population density, fishes, Atlantic salmon)
- 181 (census, anadromous species, transplantation, Atlantic salmon, Mactaquac Dam and Hatchery)
- Salinity; Salinity effects
- M 1569 (Logy Bay, Nfld.)
- Salmo gairdneri* (see Trout, rainbow)
- salar* (see Salmon, Atlantic)
- trutta* (see Trout, brown)
- Salmon (Pacific in general) (*Oncorhynchus* spp.)
- J 37(2) : 155 (spawning grounds, gravel, oxygenation)
- (4) : 561 (fishery management, Indians, predators, B.C.)
- T 923 (resource development, sociological aspects, fishery economics, B.C. coast)
- M 1528 (fish culture, escapement, fishery management, Big Qualicum R., Vancouver I., B.C.)
- 1558 (fishery resources, fishery management, migrations, Marble R., Vancouver I., B.C.)
- D 79 (habitat, spawning escapement, rivers, Prince George subdistrict, B.C.)
- 80 (habitat, spawning escapement, rivers, Statistical Area 24, Clayoquot Sound, B.C.)
- 140 (habitat, spawning escapement, rivers, Statistical Area 27, Cape Cook to Cape Scott, Vancouver I., B.C.)
- 161 (habitat, spawning escapement, rivers, Lillooet-Pemberton subdistrict, B.C.)
- 167 (habitat, spawning, escapement, rivers, Statistical Areas 22, 23, Vancouver I., B.C.)
- 168 (catch statistics, biological data, juveniles, Strait of Georgia, Nanaimo, B.C.)
- 176 (catch statistics, biological data, juveniles, Strait of Georgia, Nanaimo, B.C.)
- 183 (habitat, spawning escapement, rivers, Statistical Area 26, Kyuquot Sound, B.C.)
- 203 (habitat, spawning escapement, rivers, Chilliwack-Hope subdistrict, B.C.)
- 211 (habitat, spawning escapement, rivers, Cariboo subdistrict, B.C.)
- Salmon, Atlantic (*Salmo salar*)
- J 37(5) : 770 (hatching, pH, eggs)
- (6) : 1035 (pH acclimation, embryos, juveniles)
- (9) : 1379 (genetics, growth, developmental stages)
- (10) : 1505 (bacterial diseases, fin rot, microbiological culture)
- (11) : 1924 (predation, sea lamprey, Saint John R., N.B.)
- (12) : 2236 (bacteria, diseases, hatcheries, *Aeromonas salmonicida*, N.S.)
- T 939 (juveniles, survival, Saint John R. system, N.B.)
- 952 (juveniles, downstream migrations, literature reviews)
- M 1541 (migrations, mortality, fishways, Malay Falls, N.S.)
- 1583 (by catch, catch statistics, fishery management, N.S.)
- D 163 (juveniles, population density, stock assessment, N.S.)
- 165 (age composition, migrations, sampling, Restigouche R., N.B.)
- 171 (census, transplantation, power plants, Saint John R. system, N.B.)
- 178 (juveniles, population density, stocking organisms, Saint John R. system, N.B.)
- 181 (census, transplantation, Mactaquac Dam and Hatchery, Saint John R., N.B.)
- 202 (stocking organisms, habitat improvement, rivers, N.B., N.S.)
- 212 (sport fishing statistics, angling, catch/effort, Nfld., Labrador)
- S 2687 (aquaculture techniques, enhancement, Nfld.)
- 2691 (aromatics, bioaccumulation, measuring)
- 2703 (bioaccumulation, excretion, chemical compounds)
- 2705 (pesticides, lethal limits)
- 2720 (gear selectivity, drift nets, W Greenland-Labrador Sea)
- 2721 (food, feeding behavior, W Greenland-Labrador Sea)
- 2722 (distribution, biomass, Greenland)
- 2723 (stock identification, scale reading, W Greenland-Labrador Sea)
- 2724 (parasites, indicator species, stock identification, Greenland)
- CRD 80/8 (body weight, growth, regional variations, Greenland)
- 80/9 (body weight, season regulations, Greenland)
- 80/10 (fishing mortality, noncatch, Greenland, Canada)
- 80/11 (gear selectivity, drift nets, escapement mortality, Greenland)
- 80/12 (exploitation, mortality, catch statistics, Greenland, North America)
- Salmon, chinook (*Oncorhynchus tshawytscha*)
- J 37(4) : 600 (growth, photoperiodicity, gill ATP)
- T 944 (population structure, age composition, body size, NE Pac.)
- M 1459 (tagging, telemetry, spawning, migrations, Whitehorse Rapids Dam,

- Yukon R., Y.T.)
 1529 (fishery resources, life history, parasites, McGregor R., B.C.)
 D 187 (fishery surveys, Dixon Entrance, B.C.)
 206 (fishery surveys, Vancouver I., B.C.)
- Salmon, chum (*Oncorhynchus keta*)
 J 37(5) : 799 (VEN, pathology, physiology)
 T 930 (long term changes, size distribution, age composition, NE Pac.)
 937 (growth, fish culture, rearing)
 M 1537 (incubation, gravel streams)
 1542 (hatcheries, incubation, fry, Thornton Creek, Vancouver I., B.C.)
 1543 (fish culture, spawning, biological data, chum salmon, Lower Bella Coala Valley, B.C.)
 1562 (production, incubation, habitat improvement, Inches Creek, Fraser R. system, B.C.)
- Salmon, coho (*Oncorhynchus kisutch*)
 J 37(5) : 765 (transplantation, stress, survival)
 (9) : 1373 (production, stream flow, hatcheries, Puget Sound)
 (10) : 1495 (otoliths, growth, fry, B.C.)
 T 899 (induced breeding, ovulation, Robertson Creek Salmon Hatchery, B.C.)
 925 (stocking organisms, catch statistics, escapement, Rosewall Creek Hatchery, Vancouver I., B.C.)
 941 (stocking organisms, catch statistics, escapement, Rosewall Creek Hatchery, Vancouver I., B.C.)
 943 (stocking organisms, catch statistics, escapement, Rosewall Creek Hatchery, Vancouver I., B.C.)
 946 (excretory products, recirculating systems, growth)
 D 169 (fish culture, rearing, tagging, Rosewall Creek, Vancouver I., B.C.)
- Salmon, pink (*Oncorhynchus gorbuscha*)
 T 893 (catch statistics, yield predictions, escapement, Johnstone Strait, B.C.)
 M 1564 (size distribution, Fraser R., B.C.)
- Salmon, sockeye (*Oncorhynchus nerka*)
 J 37(2) : 203 (growth, temperature effects, food conversion, Babine L., B.C.)
 (7) : 1184 (feeding experiments, food conversion, temperature effects)
 (8) : 1236 (stock identification, population genetics, proteins, Cook Inlet, Alaska)
 SP 49 (embryonic development, eggs, incubation)
 T 912 (eggs, ammonia, toxicity)
 924 (nursery grounds, fertilization, lakes, B.C.)
 957 (nursery grounds, check lists, biomass, zooplankton, B.C.)
- Salts
 S 2666 (phytin, phospholipids, chromatographic techniques, rapeseed)
- Salvelinus alpinus* (see Char, Arctic)
fontinalis (see Trout, brook)
malma (see Dolly Varden)
namaycush (see Trout, lake)
 spp. (see Chars)
- Samplers
 J 37(4) : 606 (bongo nets, plankton collecting devices)
 (4) : 722 (BIONESS, zooplankton sampler)
 T 903 (BIONESS, gear construction)
 S 2668 (water samplers, sediment-water interface)
- Sampling (biological)
 J 37(6) : 927 (funnel traps, emergence, Chironomidae, Southern Indian L., Man.)
 (10) : 1476 (plankton, coastal zone, B.C.)
 T 933 (chlorophylls, isopleths, L. Ontario)
 M 1554 (methodology, Pacific herring)
 1559 (sport fishery, fishery surveys, walleye, Mosquito Creek, N.W.T.)
 1565 (biological data, Dover sole, Dixon Entrance, B.C.)
 D 165 (age composition, migrations, Atlantic salmon, Restigouche R., N.B.)
 192 (fishery surveys, freshwater fishes, lakes, N.S.)
 199 (biological data, tagging, Arctic grayling, Kakisa R., N.W.T.)
 S 2726 (electronic counters, zooplankton)
- Sampling (statistical)
 M 1554 (methodology, Pacific herring)
 S 2665 (biomass, diurnal variations, resource availability, witch flounder, NW Atl.)
- Sandworm (*Nereis virens*)
 S 2734 (bioaccumulation, polychlorinated biphenyls, sediments, Passamaquoddy Bay, N.B.)
- Sargasso Sea
 S 2658 (distribution, carbon, nitrogen)
 2670 (phytoplankton, growth, analytical techniques)
- Sarsia* sp. (Hydromedusae)
 B 204 (new species, B.C., Puget Sound)
- Scales; Scale reading
 S 2723 (stock identification, Atlantic salmon, W Greenland-Labrador Sea)
- Scallop, sea (*Placopecten magellanicus*) (giant scallop)
 J 37(2) : 288 (potential yield, mathematical models, Georges Bank, NW Atl.)

- T 904 (stock assessment, population characteristics, Northumberland Strait, Gulf of St. Lawrence)
 915 (fishery surveys, stock assessment, Bay of Fundy)
 S 2686 (seed collection, artificial substrata, survival, Nfld.)
- Scaridae
 J 37(1) : 49 (new records, Scotian Shelf)
- Scenedesmus quadricauda* (see Alga, green)
- Scientific personnel
 SP 46 (marine scientists, directories, Canada, 1980)
- Scomber scombrus* (see Mackerel, Atlantic)
- Scorpaena* sp? (Scorpaenidae)
 J 37(1) : 49 (new records, Scotian Shelf)
- Scotian Shelf, Northwest Atlantic Ocean
 J 37(1) : 49 (hydrography, new records, rare records, marine fishes, fish larvae)
 CRD 80/13 (catch statistics, fishing vessel statistics, stock assessment, haddock, ICNAF Div. 4VX)
 80/18 (fishery surveys, biomass stock assessment, marine fishes)
 80/31 (catch statistics, population dynamics, ecological distribution, redfishes)
 80/32 (age, growth, removals, redfishes)
 80/61 (stock assessment, catch statistics, population dynamics, haddock, ICNAF Div. 4VW)
- Scotland
 J 37(11) : 1981 (parasitism, powan, European river lamprey, Loch Lomond)
- Sea ice
 SP 45 (ice navigation, bibliographies, Canada coasts, Northern Hemisphere oceans)
 S 2733 (wind stress, drag coefficient, Arctic)
- Seal, bearded (*Erignathus barbatus*)
 M 1552 (population characteristics, Baffin I., N.W.T.)
- Seal, grey (*Halichoerus grypus*)
 S 2709 (biological surveys, breeding, Norway)
 2710 (biological surveys, population number, Norway)
- Seal, harbor (*Phoca vitulina*)
 S 2710 (biological surveys, population number, Norway)
- Seal, harp (*Pagophilus groenlandicus*)
 T 916 (organoleptic properties, frozen products, cured products, Nfld.)
- M 1552 (population characteristics, Baffin I., N.W.T.)
- Seal, ringed (*Phoca hispida*)
 J 37(12) : 2254 (food variability, feeding behavior, predation, Alaska)
 M 1552 (population characteristics, Baffin I., N.W.T.)
 1561 (breeding, habitat, behavior, Baffin I., N.W.T.)
 1577 (breeding, habitat, Bridport Inlet, Melville I., N.W.T.)
- Searobin, armored (*Peristedion miniatum*)
 J 37(1) : 49 (new record, Scotian Shelf)
- Searobin, northern (*Prionotus carolinus*)
 J 37(1) : 49 (new record, Scotian Shelf)
- Seaweeds (see names of species)
- Sebastes alutus* (see Perch, Pacific ocean)
flavidus (see Rockfish, yellowtail)
 spp. (see Redfishes; see also Rockfishes)
- Secondary production
 S 2692 (zooplankton, ecology, World Oceans)
- Sediment-water interface
 J 37(3) : 378 (radioactive tracers, fate, Experimental Lakes Area, NW Ont.)
 (3) : 552 (chemical species, Experimental Lakes Area, NW Ont.)
 S 2668 (water samplers)
 2699 (Aroclor, estuaries)
- Sedimentation
 J 37(9) : 1837 (mudflats, Windsor, N.S.)
 (10) : 1514 (rivers, Oreg.)
 T 934 (St. Georges Bay, N.S.)
- Sediments; Sediment analysis
 J 37(3) : 373 (heavy metals, mobilization, acidification, Experimental Lakes Area, NW Ont.)
 (4) : 640 (apatites, Kamloops L., B.C.)
 (4) : 656 (nitrogen cycle, denitrification, tubificid worms)
 (5) : 817 (phosphorus, lead-210 dating, Bob L., Ont.)
 M 1540 (geochemistry, L. Winnipeg, Man.)
 1568 (unconsolidated, sublittoral zone, Digdeguash R., N.B.)
 S 2731 (organic compounds, pollutants)
 2732 (pollution monitoring, terbutryn, degradation)
 2734 (polychlorinated biphenyls, bioaccumulation, sandworm, sand shrimp, Passamaquoddy Bay, N.B.)
 OD 1 (sediment sampling, ocean dumping)
- Seed collection
 S 2686 (polyethylene film, larvae, sea scallop, Nfld.)

- Seines; Seining
 D 168 (purse seines, catch statistics, biological data, Pacific salmon, Strait of Georgia, Nanaimo, B.C.)
 176 (purse seines, catch statistics, biological data, Pacific salmon, Strait of Georgia, Nanaimo, B.C.)
- Selenium; Selenium compounds
 J 37(2) : 233 (waterborne, toxicity, rainbow trout)
 (5) : 848 (ecosystems, Clay L., Ont.)
- Sensors
 S 2727 (wind stress, heat transfer, World Oceans)
- Sergestid, ocean (*Sergia tenuiremis*)
 B 202 (new records, NE Pac.)
- Sergia tenuiremis* (see Sergestid, ocean)
- Serological studies
 J 37(4) : 719 (bacterial diseases, salmonids, *Corynebacterium salmoninus*)
 (12) : 2236 (bacteria, hatcheries, *Aeromonas salmonicida*, N.S.)
- Serum
 J 37(2) : 163 (bioassays, enzymes, rainbow trout)
- Seston
 J 37(1) : 111 (photosynthetic pigments, phosphorus, chlorophylls, freshwater lakes)
 (4) : 624 (dynamics, clear-cutting, streams, Appalachians, N.C.)
 (12) : 2242 (ecology, trophic structure, Hudson Bay)
- Sex determination
 J 37(2) : 283 (beaks, biometrics, short-finned squid, Nfld.)
 (12) : 2362 (sexual dimorphism, humpback whale, Pac. Ocean)
 B 202 (shrimps, NE Pac.)
- Sexual cells
 T 948 (gametes, cryobiology, carps, catfishes, Thailand)
- Sexual dimorphism
 J 37(12) : 2362 (sex determination, humpback whale, Pac. Ocean)
- Sexual maturity
 J 37(10) : 1488 (size distribution, computer programs, Alaska king crab, tanner crab, Bering Sea)
 S 2664 (spawning, population dynamics, haddock, St. Pierre Bank, NW Atl.)
 CRD 80/21 (Atlantic herring, ICNAF Div. 4WX, NW Atl.)
- Shad, American (*Alosa sapidissima*)
 CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
- Shellfish (see names of species)
- Shellfish catch statistics
 CRD 80/55 (catch/effort, stock assessment, snow crab, Cape Breton, N.S.)
 80/56 (landing statistics, long term changes, catch/effort, American lobster, NW Atl.)
- Shellfish culture (see also Aquaculture; Aquaculture techniques)
 J 37(6) : 964 (vibriosis, pathogenesis, Atlantic oyster)
 S 2686 (seed collection, artificial substrata, survival, sea scallop, Nfld.)
 2690 (gaffkemia, *Aerococcus viridans*, American lobster)
 2697 (recirculating systems, experimental research, American lobster)
- Shiner, spottail (*Notropis hudsonius*)
 J 37(10) : 1557 (temperature preference, habitat, sympatric populations, L. Michigan)
- Shrimp, brown (*Penaeus aztecus*)
 J 37(6) : 1000 (growth, length-weight relationships, mathematical models, N.C.)
- Shrimp, Burkenroad's blunt-tailed (*Bentheogennema burkenroadi*)
 B 202 (new records, NE Pac.)
- Shrimp, candy stripe (*Lebbeus grandimanus*) (*Lebbeus polaris*)
 B 202 (terminology, NE Pac.)
- Shrimp, large-eyed coastal (*Heptacarpus littoralis*)
 B 202 (new species, NE Pac.)
- Shrimp, northern blunt-tailed (*Bentheogennema borealis*)
 B 202 (new species, NE Pac.)
- Shrimp, northern coastal (*Heptacarpus camtschaticus*)
 B 202 (new records, NE Pac.)
- Shrimp, northern pink (*Pandalus borealis*)
 I 117 (potential resources, fishery development, economics, NW Atl., Canada)
 CRD 80/14 (stock assessment, resource availability, fishery management, ICNAF Div. 2H, 2J, Labrador, Nfld.)
 80/15 (exploratory fishing, resource availability, Ungava Bay, E Hudson Strait, ICNAF Div. 2G, NW Atl.)
 80/64 (age determination, length-weight relationships, N.S.)

- Shrimp, opossum (*Mysis relicta*)
J 37(2) : 177 (predators, alewife, L. Michigan)
(6) : 909 (predators, selective feeding, zooplankton)
- Shrimp, oval bladed (*Spirontocaris ochotensis*)
B 202 (new records, NE Pac.)
- Shrimp, pink (*Penaeus duorarum*)
J 37(6) : 1000 (growth, length-weight relationships, mathematical models, N.C.)
- Shrimp, sand (*Crangon septemspinosa*)
S 2705 (pesticides, lethal limits)
2734 (bioaccumulation, polychlorinated biphenyls, sediments, Passamaquoddy Bay, N.B.)
- Shrimp, small-eyed coastal (*Heptacarpus carinatus*)
B 202 (new records, NE Pac.)
- Shrimp, Stimpson's coastal (*Heptacarpus stimpsoni*)
B 202 (new records, NE Pac.)
- Shrimp, striped pink (*Pandalus montagui*)
CRD 80/15 (exploratory fishing, resource availability, Ungava Bay, E Hudson Strait, ICNAF Div. 2G, NW Atl.)
- Shrimps (see Decapoda; also names of species)
B 202 (synopsis, NE Pac.)
- Size distribution
J 37(9) : 1337 (length-frequency analysis, growth, mathematical models, fishes)
(10) : 1488 (sexual maturity, computer programs, Alaska king crab, tanner crab, Bering Sea)
(12) : 2358 (echo surveys, sperm whale, NW Atl.)
T 930 (long term changes, chum salmon, NE Pac.)
M 1564 (pink salmon, Fraser R., B.C.)
D 184 (Arctic char, Cambridge Bay, N.W.T.)
S 2718 (population structure, lake trout)
- Size-limit regulations
J 37(5) : 873 (population genetics, growth, brown trout)
- Skate, thorny (*Raja radiata*)
CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
- Smelt, rainbow (*Osmerus mordax*)
J 37(10) : 1557 (temperature preference, habitat, sympatric populations, L. Michigan)
CRD 80/18 (fishery surveys, biomass, stock assessment, Scotian Shelf, Gulf of St. Lawrence)
- Snailfish, Atlantic (*Liparis atlanticus*)
B 208 (taxonomy, geographical distribution, life history, arctic Canada)
- Snailfish, dusky (*Liparis gibbus*)
B 208 (taxonomy, geographical distribution, life history, arctic Canada)
- Snailfish, gelatinous (*Liparis fabricii*)
B 208 (taxonomy, geographical distribution, life history, arctic Canada)
- Snailfish, kelp (*Liparis tunicatus*)
B 208 (taxonomy, geographical distribution, life history, arctic Canada)
- Snakefish (*Trachinocephalus myops*)
J 37(1) : 49 (new records, Scotian Shelf)
- Sole, Dover (*Microstomus pacificus*)
M 1565 (tagging, spawning migrations, Dixon Entrance, B.C.)
- Sole, English (*Parophrys vetulus*)
M 1563 (trawling, landing statistics, Strait of Georgia, B.C.)
D 187 (fishery surveys, Dixon Entrance, B.C.)
190 (length, age composition, landing statistics, Hecate Strait, B.C.)
- Sole, rock (*Lepidopsetta bilineata*)
D 177 (population structure, length, age composition, Butterworth-Warren Area, Hecate Strait, B.C.)
- Somateria mollissima (see Eider, common)
spectabilis (see Eider, king)
- Spawning; Spawning behavior; Spawning seasons
J 37(2) : 143 (year-class, striped bass, Potomac R. estuary, Md.)
(11) : 1635 (lampreys, Great Lakes)
(11) : 1906 (river lamprey, Pacific lamprey, B.C., Pac. Ocean)
(11) : 1924 (anadromous species, sea lamprey, NW Atl.)
(11) : 1944 (lampreys, N Europe)
(11) : 1974 (European river lamprey, N Sweden)
T 896 (stock assessment, eggs, Pacific herring, French Creek, Qualicum Herring Sections, B.C.)
905 (capelin, Atlantic cod, haddock, redfish, American plaice, yellowtail flounder, witch flounder, Nfld., Labrador)
M 1529 (environmental conditions, chinook salmon, McGregor R., B.C.)
1543 (biological data, fish culture, chum salmon, Lower Bella Coola Valley, B.C.)
1545 (stock assessment, Pacific herring, Chatham Sound, B.C.)
1547 (stock assessment, Pacific herring, Clayoquot Sound, B.C.)

- D 79 (habitat, escapement, rivers, Pacific salmon, Prince George subdistrict, B.C.)
- 80 (habitat, escapement, rivers, Pacific salmon, Statistical Area 24, Clayoquot Sound, B.C.)
- 140 (habitat, escapement, rivers, Pacific salmon, Statistical Area 27, Cape Cook to Cape Scott, Vancouver I., B.C.)
- 161 (habitat, escapement, rivers, Pacific salmon, Lillooet-Pemberton subdistrict, B.C.)
- 167 (habitat, escapement, rivers, Pacific salmon, Statistical Areas 22, 23, Vancouver I., B.C.)
- 183 (habitat, escapement, rivers, Pacific salmon, Statistical Area 26, Kyuquot Sound, B.C.)
- 203 (habitat, escapement, rivers, Pacific salmon, Chilliwack-Hope subdistrict, B.C.)
- 211 (habitat, escapement, rivers, Pacific salmon, Cariboo subdistrict, B.C.)
- I 118 (fishery management, roe, Pacific herring, B.C.)
- S 2664 (sexual maturity, population dynamics, haddock, St. Pierre Bank, NW Atl.)
- CRD 80/42 (multiple fertilization, American lobster)
- 80/59 (biomass, ichthyoplankton surveys, stock assessment, Atlantic herring, Isle Verte, St. Lawrence R. estuary)
- Spawning grounds
- J 37(2) : 155 (gravel, oxygenation, Pacific salmon)
- T 894 (eggs, Pacific herring, B.C.)
- 905 (capelin, Atlantic cod, haddock, redfish, American place, yellowtail flounder, witch flounder, Nfld., Labrador)
- M 1534 (aquatic plants, charts, aerial photography, Pacific herring, Stuart Channel, Strait of Georgia, B.C.)
- 1536 (aquatic plants, charts, aerial photography, Pacific herring, Clayoquot Sound, B.C.)
- 1549 (aquatic plants, charts, aerial photography, Pacific herring, Barkley Sound, B.C.)
- 1579 (aquatic plants, charts, aerial photography, Pacific herring, Thompson Bay, B.C.)
- 1580 (aquatic plants, charts, aerial photography, Pacific herring, Laredo Sound, B.C.)
- Spawning migrations
- J 37(11) : 1851 (lampricides, sea lamprey, streams, L. Superior)
- (11) : 2118 (barriers, predator control, sea lamprey, Great Lakes)
- T 931 (walleye, Southern Indian L., Man.)
- M 1459 (tagging, telemetry, chinook salmon, Whitehorse Rapids Dam, Yukon R., Y.T.)
- 1565 (tagging, Dover sole, Dixon Entrance, B.C.)
- Species, new (see New species)
- Species, rare (see Rare species)
- Spectroscopic techniques
- J 37(7) : 1160 (photomicroscopy, frustules, diatoms)
- S 2662 (fluorescence spectroscopy, alkaline phosphatase, Algae)
- 2667 (mass spectrometry, methyl ether, carbohydrates)
- Spinal cord
- J 37(11) : 1723 (neurophysiology, lampreys)
- Spinyhead, deepsea (*Metacrangon variabilis*)
- B 202 (new records, NE Pac.)
- Spinyhead, forked (*Metacrangon acclivis*)
- B 202 (new records, NE Pac.)
- Spinytail, Krygier's (*Systellaspis cristata*) (*Acantheephyra quadrispinosa*)
- B 202 (terminology, NE Pac.)
- Spirontocaris ochotensis* (see Shrimp, oval bladed)
- Spores
- J 37(6) : 1032 (chemical extraction, whirling disease)
- (12) : 2225 (detection, methodology, whirling disease)
- Sport fishing; Sport fishing statistics
- J 37(8) : 1321 (fishery economics, evaluation, recreation, Canada)
- SP 52 (fishery resources, fishery economics, fishery management, Canada)
- M 1553 (Arctic grayling, northern pike, Mackenzie R., N.W.T.)
- 1559 (fishery surveys, sampling, walleye, Mosquito Creek, N.W.T.)
- 1566 (striped bass, Annapolis R., N.S.)
- D 186 (catch/effort, biological data, freshwater fishes, walleye, Mosquito Creek, N.W.T.)
- 188 (angling, catch/effort, walleye, Hay R., N.W.T.)
- 199 (catch/effort, tagging, Arctic grayling, Kakisa R., N.W.T.)
- 212 (angling, catch/effort, Atlantic salmon, Nfld., Labrador)
- Squalus acanthias* (see Dogfish, spiny)
- Squid, Canadian Atlantic (see Squid, short-finned)

- Squid, flying (*Ommastrephes bartramii*) (4) : 583 (nutrient cycles, marine birds)
 T 942 (fishery development, potential (6) : 979 (ecological distribution, resources, commercial species, B.C.) benthic invertebrates)
- Squid, nail (*Onychoteuthis borealijaponica*) I 114 (fishery development, processing, potential resources, green sea urchin)
 T 942 (fishery development, potential CRD 80/59 (ichthyoplankton surveys, spawning, resources, commercial species, B.C.) stock assessment, Atlantic herring, Isle Verte)
- Squid, opal (*Loligo opalescens*)
 T 942 (fishery development, potential St. Margaret's Bay, N.S.
 resources, commercial species, B.C.) T 954 (resource management, predators, green sea urchin, kelp, American lobster)
- Squid, red (*Berrytheuthis magister*)
 T 942 (fishery development, potential Statistical analysis
 resources, commercial species, B.C.) J 37(4) : 716 (regression analysis, group measurements)
- Squid, short-finned (*Illex illecebrosus*) (Squid, Canadian Atlantic) (4) : 725 (multivariate analysis, meristic counts, capelin, NW Atl.)
 J 37(2) : 283 (sex determination, beaks, (4) : 733 (temperature preference, fish physiology)
 biometrics, Nfld.) (6) : 920 (growth curves)
 T 898 (quality control, chilling storage, (6) : 945 (numerical analysis, size-maturity, American lobster, Nfld.)
 preservation) (7) : 1149 (phenotypic variations, isozymes)
 900 (drying, preservation, quality (8) : 1229 (catch/effort, mathematical models)
 control) (9) : 1358 (origination, reciprocal averaging, macroinvertebrates)
 902 (quality assurance, biochemical (12) : 2346 (variance analysis, catch/effort, standardization)
 analysis, methodology, Canada) T 895 (variance analysis, long term changes, environmental effects, Southern Indian L., Man.)
 CRD 80/18 (fishery surveys, biomass, stock 959 (cohort analysis, stock assessment, population dynamics, Pacific herring, B.C.)
 assessment, Scotian Shelf, Gulf of 960 (cohort analysis, stock assessment, population dynamics, Pacific herring, Barkley Sound, B.C.)
 St. Lawrence) CRD 80/62 (stock assessment, population characteristics, redfishes, NW Atl.)
- St. Lawrence, Gulf of (see also Northumberland Strait)
 J 37(4) : 693 (bioacoustics, population density, orientation, euphausiids)
 (4) : 703 (pH, water analysis)
 (6) : 979 (ecological distribution, benthic invertebrates)
 (6) : 1028 (phytoplankton, fluorescence, photosynthesis)
 CRD 80/18 (fishery surveys, biomass, stock assessment, marine fishes)
 80/19 (fishery surveys, ichthyoplankton surveys, stock assessment, white hake, ICNAF Div. 4T)
 80/24 (landing statistics, population characteristics, stock assessment, Greenland halibut)
 80/33 (food consumption, food organisms, growth, Atlantic cod)
 80/34F (catch statistics, population structure, population dynamics, Greenland halibut)
 80/37 (feeding behavior, stomach content, predation, Atlantic cod)
 80/49 (fishery management, program evaluation, witch flounder, NAFO Div. 4RS)
 80/54 (stock assessment, catch statistics, population characteristics, Atlantic herring)
 80/60 (stock assessment, population dynamics, redfishes)
- St. Lawrence River Estuary
 J 37(1) : 66 (subpopulation, stock identification, Atlantic herring)
- Stenodus leucichthys* (see Inconnu)
- Stenonema* (see Mayflies)
- Sterols
 S 2657 (chromatographic techniques, fishery products)
- Stizostedion vitreum vitreum* (see Walleye)
- Stock assessment
 J 37(8) : 1276 (methodology, potential yield, mathematical models)
 (11) : 2197 (methodology, fisheries, predators, sea lamprey, Great Lakes)
 (12) : 2272 (catch/effort, mathematical models, standardization)
 T 894 (eggs, Pacific herring, B.C.)
 896 spawning, eggs, Pacific herring, French Creek, Qualicum Herring Sections, B.C.)

- 904 (sea scallop, Northumberland Strait, Gulf of St. Lawrence)
- 915 (fishery surveys, sea scallop, Bay of Fundy)
- 932 (American lobster, NW Atl.)
- 947 (production, abalone, B.C.)
- 953 (computer programs, APL, data processing)
- 959 (population dynamics, Pacific herring, B.C.)
- 960 (population dynamics, Pacific herring, Barkley Sound, B.C.)
- M 1545 (spawn surveys, Pacific herring, Chatham Sound, B.C.)
- 1547 (spawn surveys, Pacific herring, Clayoquot Sound, B.C.)
- 1550 (fishery management, yield predictions, roe, Pacific herring, B.C.)
- 1553 (fishery management, Arctic grayling, northern pike, Mackenzie R., N.W.T.)
- 1566 (biological surveys, striped bass, Annapolis R., N.S.)
- 1570 (potential yield, foreign fishing, Pacific ocean perch, Queen Charlotte Sound, B.C.)
- 1572 (fishery surveys, echo surveys, walleye pollock, Dixon Entrance, B.C.)
- 1576 (abalone, Lotbinière Bay, Emily Carr Inlet, B.C.)
- D 163 (juveniles, Atlantic salmon, N.S.)
- 179 (catch statistics, Pacific cod, Hecate Strait, B.C.)
- 180 (monitoring, Pacific cod, Vancouver I., B.C.)
- 185 (commercial species, groundfish, NE Pac.)
- 187 (marine fishes, walleye pollock, Dixon Entrance, B.C.)
- 191 (fishery surveys, Pacific cod, Hecate Strait, B.C.)
- 206 (marine fishes, walleye pollock, Vancouver I., B.C.)
- 208 (commercial species, groundfish, NE Pac.)
- 215 (exploratory fishing, catch statistics, rockfishes, Queen Charlotte Is., B.C.)
- 216 (exploratory fishing, catch statistics, rockfishes, Queen Charlotte Sound, B.C.)
- 218 (exploratory fishing, catch statistics, rockfishes, Queen Charlotte Is., Vancouver I., B.C.)
- I 112 (roe fishery, Pacific herring, B.C.)
- S 2671 (finback whale, N Atl.)
- CRD 80/1 (population characteristics, landing statistics, pollock, ICNAF Div. 4VWX-5-6, NW Atl.)
- 80/2 (population characteristics, landing statistics, haddock, ICNAF Div. 4X, NW Atl.)
- 80/13 (catch statistics, fishing vessel statistics, haddock, ICNAF Div. 4VX, Scotian Shelf)
- 80/14 (resource availability, northern pink shrimp, ICNAF Div. 2H, 2J, Labrador, Nfld.)
- 80/16 (fishery surveys, catch statistics, Atlantic cod, ICNAF Subdiv. 4Vn, NW Atl.)
- 80/18 (fishery surveys, biomass, marine fishes, Scotian Shelf, Gulf of St. Lawrence)
- 80/19 (fishery surveys, ichthyoplankton surveys, white hake, ICNAF Div. 4T, Gulf of St. Lawrence)
- 80/20 (juveniles, Atlantic herring, ICNAF Div. 4X, NW Atl.)
- 80/22 (catch statistics, population characteristics, Atlantic cod, ICNAF Div. 4T, 4Vn, NW Atl.)
- 80/24 (landing statistics, population characteristics, Greenland halibut, Gulf of St. Lawrence)
- 80/25 (production models, redfishes, ICNAF Subarea 2, Div. 3K, NW Atl.)
- 80/26 (catch/effort, production models, redfishes, ICNAF Div. 3Ø, NW Atl.)
- 80/27 (catch statistics, population characteristics, Atlantic cod, ICNAF Div. 3Pn, 4RS, NW Atl.)
- 80/28 (production models, catch/effort, Atlantic cod, ICNAF Subdiv. 3Pn, Div. 4R, 4S, NW Atl.)
- 80/29 (production models, catch/effort, Atlantic cod, ICNAF Subdiv. 3Ps, NW Atl.)
- 80/35 (landing statistics, witch flounder, St. Pierre Bank, NW Atl.)
- 80/36 (catch/effort, catch statistics, flatfishes, ICNAF Div. 4VWX, NW Atl.)
- 80/38 (fishing vessel statistics, Atlantic cod, ICNAF Div. 4VSW, NW Atl.)
- 80/41 (landing statistics, catch/effort, American plaice, NAFO Div. 4T, NW Atl.)
- 80/46 (population dynamics, Atlantic cod, ICNAF Div. 4X, NW Atl.)
- 80/47 (catch statistics, yield predictions, Atlantic herring, ICNAF Div. 4WX, NW Atl.)
- 80/48 (population characteristics, Atlantic cod, ICNAF Subdiv. 3Ps, NW Atl.)
- 80/50 (catch statistics, Atlantic herring, ICNAF Subdiv. 4Vn, NW Atl.)
- 80/51 (catch statistics, Atlantic herring, W Nfld.)
- 80/52 (catch statistics, Atlantic herring, E Nfld.)
- 80/53 (catch statistics, American plaice, ICNAF Subdiv. 3Ps, NW Atl.)
- 80/54 (catch statistics, Atlantic herring, Gulf of St. Lawrence)
- 80/55 (biological assessment, catch/effort, snow crab, Cape Breton, N.S.)
- 30/56 (landing statistics, long term changes, American lobster, NW Atl.)
- 80/58 (catch statistics, catch/effort, American plaice, ICNAF Subarea 2, Div. 3K, NW Atl.)

- 80/59 (ichthyoplankton surveys, spawning, Atlantic herring, Isle Verte, St. Lawrence R. estuary)
- 80/60 (population dynamics, redfishes, Gulf of St. Lawrence)
- 80/61 (catch statistics, population dynamics, haddock, Scotian Shelf, ICNAF Div. 4VW, NW Atl.)
- 80/62 (statistical analysis, population characteristics, redfishes, NW Atl.)
- 80/63 (catch/effort, production models, Atlantic cod, ICNAF Div. 2GH, NW Atl.)
- 80/65 (catch statistics, population characteristics, Atlantic mackerel, NAFO SA 3-6, NW Atl.)
- Stock identification**
- J 37(1) : 66 (Atlantic herring, St. Lawrence R. estuary, Gaspé, Que.)
- (5) : 783 (population genetics, isozymes, lake whitefish, L. Michigan)
- (8) : 1236 (population genetics, proteins, electrophoresis, sockeye salmon, Cook Inlet, Alaska)
- M 1544 (tagging, Pacific herring)
- S 2723 (scale reading, Atlantic salmon, W Greenland-Labrador Sea)
- 2724 (indicator species, parasites, Atlantic salmon, Greenland)
- CRD 80/30 (population genetics, taxonomy, blackbelly rosefish, redfishes, NAFO Div. 4VWX, NW Atl.)
- Stocking (organisms) (see also Fish culture)**
- J 37(1) : 82 (genetics, hatcheries, brown trout, Sweden)
- (5) : 805 (stress, fingerlings, rainbow trout)
- (11) : 2047 (lake trout, L. Michigan)
- (11) : 2057 (lake trout, program evaluation, L. Superior)
- (11) : 2133 (population dynamics, lake trout, Great Lakes)
- T 925 (rearing, catch statistics, escapement, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.)
- 941 (rearing, catch statistics, escapement, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.)
- 943 (rearing, catch statistics, escapement, coho salmon, Rosewall Creek Hatchery, Vancouver I., B.C.)
- D 171 (transplantation, Atlantic salmon, power plants, Saint John R. system, N.B.)
- 178 (hatcheries, juveniles, Atlantic salmon, Saint John R. system, N.B.)
- 181 (transplantation, Atlantic salmon, Mactaquac Dam and Hatchery, Saint John R., N.B.)
- 202 (habitat improvement, rivers, Atlantic salmon, N.B., N.S.)
- S 2687 (aquaculture techniques, enhancement, Atlantic salmon, Nfld.)
- Stonecat (*Noturus flavus*)
- J 37(11) : 1886 (environmental effects, population control, sea lamprey, Great Lakes)
- Storage; Storage effects**
- J 37(9) : 1458 (chilled products, organoleptic properties, walleye pollock)
- T 898 (chilling, quality control, short-finned squid)
- 913 (freezing storage, minced products, temperature effects, cusk)
- 916 (frozen products, cured products, organoleptic properties, harp seal, Nfld.)
- 921 (preservation, quality control, roe, Pacific herring, B.C.)
- Strait of... (see name of strait)**
- Stranding**
- S 2730 (ecological aspects, natural mortality, Cetacea)
- Stratification**
- J 37(3) : 506 (summer, denitrification, nitrogen cycle, Experimental Lakes Area, NW Ont.)
- Strongylocentrotus droebachiensis* (see Urchin, green sea)
- Sucker, longnose (*Catostomus catostomus*)**
- M 1510 (fishery resources, Great Bear R., N.W.T.)
- D 186 (catch/effort, biological data, Mosquito Creek, N.W.T.)
- 201 (catch/effort, experimental fishing, reservoirs, Southern Indian L., Man.)
- Sucker, white (*Catostomus commersoni*)**
- J 37(10) : 1573 (heavy metals, bioaccumulation, lakes, Flin Flon, Man.)
- D 186 (catch/effort, biological data, Mosquito Creek, N.W.T.)
- 201 (catch/effort, experimental fishing, reservoirs, Southern Indian L., Man.)
- Sulfate**
- J 37(8) : 1266 (cations, ion exchange, water analysis)
- Sunfish, green (*Lepomis cyanellus*)**
- J 37(2) : 225 (juveniles, mortality, winter)
- Sunfish, northern longear (*Lepomis megalotis* *peltastes*)**
- J 37(9) : 1411 (sympatric populations, ecological distribution, food resources, Mich.)
- Superior, Lake, America**
- J 37(11) : 1780 (historical account, dispersion, population control, sea lamprey)
- (11) : 1851 (lampricides, spawning migrations, streams, sea lamprey)

- (11): 1872 (geographical distribution, endemic species, lampicides, sea lamprey, lampreys)
- (11): 2057 (stocking, program evaluation, lake trout)
- (11): 2063 (total mortality, predation, sea lamprey, lake trout)
- (11): 2074 (population dynamics, predation, sea lamprey, lake trout, Gull Island Reef)
- (12): 2228 (polymorphism, population genetics, taxonomy, shortjaw cisco)
- Suspended matter
- J 37(8) : 1209 (variability, environmental effects, Petpeswick Inlet, N.S.)
- T 934 (nutrients, seasonal variations, St. Georges Bay, N.S.)
- S 2658 (carbon, nitrogen, distribution, Sargasso Sea)
- Sweden
- J 37(1) : 82 (genetics, stocking, hatcheries, brown trout)
- (11): 1974 (ecology, European river lamprey, N Sweden)
- Swimming
- J 37(7) : 1086 (speeds, bioenergetics, mathematical models, fishes)
- (9) : 1454 (speeds, northern pike, Lac Ste. Anne, Alta.)
- (10): 1550 (circadian rhythms, jellyfish)
- Swordfish (*Xiphias gladius*)
- J 37(11): 1924 (predators, sea lamprey, NW Atl.)
- Syacium* sp. (Bothidae)
- J 37(1) : 49 (rare records, Scotian Shelf)
- Sympatric populations
- J 37(9) : 1411 (ecological distribution, food resources, pumpkinseed, northern longear sunfish, Mich.)
- (10): 1557 (temperature preference, habitat, freshwater fishes, L. Michigan)
- Symphurus minor* (see Tonguefish, large scale)
- Synodus* sp. (Synodontidae)
- J 37(1) : 49 (new record, Scotian Shelf)
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201. Bednarik, A. F., and W. P. McCafferty. 1979. Biosystematic revision of the genus *Stenonema* (Ephemeroptera: Heptageniidae). 73 p. (Canada \$8.50, other countries \$10.20.)
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Technical Reports may be cited as full publications. The correct citation appears above the abstract of each report. Each report will be abstracted in *Aquatic Sciences and Fisheries Abstracts* and will be indexed annually in the Department's index to scientific and technical publications.

Numbers 1-456 in this series were issued as Technical Reports of the Fisheries Research Board of Canada. Numbers 457-714 were issued as Department of the Environment, Fisheries and Marine Service, Research and Development Directorate Technical Reports. Numbers 715-924 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Technical Reports. The current series name was changed with report number 925 and is now Canadian Technical Report of Fisheries and Aquatic Sciences.

Numbers 834, 857, 859, and 863 were issued too late for listing and indexing in previous indexes. They are indexed herein. The numerals in parentheses at the end of each reference indicate the name of the establishment from which the information or the Report originated. See pages 2374 and 2375 for addresses corresponding to these numerals. Copies of Technical Reports may be obtained from Micromedia Ltd., 144 Front Street West, Toronto, Ontario M5J 1G2.)

(REMARQUE: Ces rapports contiennent des renseignements scientifiques et techniques qui constituent une contribution importante aux connaissances actuelles mais qui, pour une raison ou pour une autre, ne semblent pas appropriés pour la publication dans un journal scientifique. Il n'y a aucune restriction quant au sujet, de fait, la série reflète la vaste gamme des intérêts et des politiques du Ministère des Pêches et des Océans, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada.)

Les Rapports techniques peuvent être considérés comme des publications complètes. Le titre exact paraîtra au haut du résumé de chaque rapport, qui sera publié dans la revue *Aquatic Sciences and Fisheries Abstracts* et qui figurera dans l'index annuel des publications scientifiques et techniques du Ministère.

Les numéros 1-456 de cette série ont été publiés à titre de Rapports techniques de l'Office des recherches sur les pêcheries du Canada. Les numéros 457-714, à titre de Rapports techniques de la Direction générale de la recherche et du développement, Service des pêches et de la mer, ministère de l'Environnement. Les numéros 715-924 ont été publiés à titre de Rapports techniques du Service des pêches et de la mer, Ministère des Pêches et de l'Environnement. Le nom de la série a été modifié à partir du numéro 925 et est maintenant Rapport technique canadien des sciences halieutiques et aquatiques.

Les numéros 834, 857, 859 et 863, sont sortis trop tard pour les inclure dans les index antérieurs. Le numéro entre parenthèses, à la fin de chaque référence, indique l'établissement d'où provient la documentation du rapport. Voir aux pages 2374 et 2375 les adresses correspondant à ces numéros. On peut se procurer des exemplaires de Rapports techniques auprès de Micromedia Ltd., 144 Front Street West, Toronto, Ontario M5J 1G2.)

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934. Marine Ecology Laboratory. 1980. Physical oceanography, dissolved nutrients, phytoplankton production, plankton biomass and sedimentation in St. Georges Bay, N.S. 1977. 162 p. (7)
935. McCart, P. J. 1980. A review of the systematics and ecology of Arctic char, *Salvelinus alpinus*, in the western Arctic. 89 p. (4)
937. Shelbourn, J. E. 1980. Early growth rates of chum salmon fry (*Oncorhynchus keta*) in the laboratory in fresh and salt water. 6 p. (1)
938. Cleugh, T. R., and L. R. Russell. 1980. Fisheries and fish related publications in the Yukon Territory. 51 p. (12)
939. Watt, W. D., and G. H. Penney. 1980. Juvenile salmon survival in the Saint John River system. 13 p. (8)
940. Lacalli, T. C. 1980. A guide to the marine flora and fauna of the Bay of Fundy: Polychaete larvae from Passamaquoddy Bay. 27 p. (6)
941. Bilton, H. T. 1980. Returns of adult coho salmon in relation to mean size and time at release of juveniles to the catch and the escapement. 41 p. (1)
942. Bernard, F. R. 1980. Preliminary report on the potential commercial squid of British Columbia. 51 p. (1)
943. Bilton, H. T., and D. W. Jenkinson. 1980. Return to the fishery and escapement of adult coho salmon from accelerated juveniles released in the fall of 1974. 11 p. (1)
944. Ricker, W. E. 1980. Causes of the decrease in age and size of chinook salmon (*Oncorhynchus tshawytscha*). 25 p. (1)
- 945F. Greendale, R. et H. Powles. 1980. La pêche côtière au hareng en Gaspésie, 1970-1978. 58 p. (13)
946. Haywood, G. P., J. R. Brett, and J. M. Blackburn. 1980. Accumulation of excretory products and effect on growth of yearling coho salmon (*Oncorhynchus kisutch*) in gradually increasing recirculated water. 17 p. (1)
947. Breen, P. A. 1980. Measuring fishing intensity and annual production in the abalone fishery of British Columbia. 49 p. (1)
948. Withler, F. C. 1980. Chilled and cryogenic storage of gametes of Thai carps and catfishes. 15 p. (1)
949. Campbell, J. S., and K. D. Rows. 1980. Growth and survival of walleye, *Stizostedion vitreum vitreum* (Mitchill) in rearing ponds near Lake Winnipegosis, Manitoba. 17 p. (4)
950. Daye, P. G. 1980. Effects of ambient pH on fish: an annotated bibliography. 28 p. (6)
951. Levings, C. D. 1980. Demersal and benthic communities in Howe Sound basin and their responses to dissolved oxygen deficiency. 27 p. (3)
952. Ruggles, C. P. 1980. A review of the downstream migration of Atlantic salmon. 39 p. (8)
953. Rivard, D. 1980. APL programs for stock management. 103 p. (10)
954. Pringle, J. D., G. J. Sharp, and J. F. Caddy. (eds.) 1980. Proceedings of the workshop on the relationship between sea urchin grazing and commercial plant/animal harvesting. 273 p. (8)
956. Leaman, B. M., D. Davenport, J. R. Selsby, and D. C. H. Yao. 1980. Biological observer coverage of foreign fisheries off Canada's Pacific coast, 1978. 245 p. (1)
957. Rankin, D. P., and H. J. Ashton. 1980. Crustacean zooplankton abundance and species composition in 13 sockeye salmon (*Oncorhynchus nerka*) nursery lakes in British Columbia. 39 p. (1)
958. McGurk, M. D., J. M. Green, W. D. McKone, and K. Spencer. 1980. Condition indices, energy density and water and lipid content of Atlantic herring (*Clupea harengus harengus*) of southeastern Newfoundland. 41 p. (9)
959. Hourston, A. S., and J. F. Schweigert. 1980. Cohort analysis vs direct measures of the abundance of major populations of herring on Canada's west coast, 1971-1979. 15 p. (1)
960. Schweigert, J. F., and A. S. Hourston. 1980. Cohort analysis and mortality rates for the Barkley Sound herring stock, 1972-1979. 37 p. (1)

961. Smith, J. E. 1980. Catch and effort statistics of the Canadian groundfish fishery on the Pacific coast in 1979. 90 p. (1)
962. Peterson, R. H. 1980. Water chemistry of ten lakes in southern New Brunswick. 25 p. (6)
964. Nickerson, S., P. M. Ryan, G. Somerton, and J. Wright. 1980. A computer program for processing fish age and growth data. 20 p. (9)

MANUSCRIPT REPORTS/RAPPORTS MANUSCRITS

Abbreviation/Abréviation: M

(NOTE: These reports contain scientific and technical information that represents an important contribution to existing knowledge but which for some reason may not be appropriate for primary scientific (i.e. *Journal*) publication. They differ from Technical Reports in terms of subject scope and potential audience: Manuscript Reports deal primarily with national or regional problems and distribution is generally restricted to institutions or individuals located in particular regions of Canada. No restriction is placed on subject matter and the series reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries management, technology and development, ocean sciences, and aquatic environments relevant to Canada.

Manuscript Reports may be cited as full publications. The correct citation appears above the abstract of each report. Each report will be abstracted by *Aquatic Sciences and Fisheries Abstracts* and will be indexed annually in the Department's index to scientific and technical publications.

Numbers 1-900 in this series were issued as Manuscript Reports (Biological Series) of the Biological Board of Canada, and subsequent to 1937 when the name of the Board was changed by Act of Parliament, as Manuscript Reports (Biological Series) of the Fisheries Research Board of Canada. Numbers 901-1425 were issued as Manuscript Reports of the Fisheries Research Board of Canada. Numbers 1426-1550 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Manuscript Reports. The current series name was changed with report number 1551 and is now Canadian Manuscript Report of Fisheries and Aquatic Sciences.

Numbers 1459, 1510, 1526, 1528, and 1529 were issued too late for listing and indexing in previous indexes. They are indexed herein. The numerals in parentheses at the end of each reference indicate the name of the establishment from which the information or the report originated. See pages 2374 and 2375 for addresses corresponding to these numerals. Copies of Manuscript Reports may be obtained from Micromedia Ltd., 144 Front Street West, Toronto, Ontario M5J 1G2.)

(REMARQUE: Ces rapports contiennent des renseignements scientifiques et techniques qui constituent une contribution importante aux connaissances actuelles mais qui, pour une raison ou pour une autre, ne semblent pas appropriés pour la publication dans un journal scientifique. Ils se distinguent des Rapports techniques par la portée du sujet et le lecteur visé; en effet, ils s'attachent principalement à des problèmes d'ordre national ou régional et la distribution en est généralement limitée aux organismes et aux personnes de régions particulières du Canada. Il n'y a aucune restriction quant au sujet; de fait, la série reflète la vaste gamme des intérêts et des politiques du Ministère des Pêches et des Océans, notamment gestion des pêches; techniques et développement, sciences océaniques et environnements aquatiques au Canada.

Les Manuscrits peuvent être considérés comme des publications complètes. Le titre exact paraît au haut du résumé de chaque rapport, qui sera publié dans la revue *Aquatic Sciences and Fisheries Abstracts* et qui figurera dans l'index annuel des publications scientifiques et techniques du Ministère.

Les numéros de 1 à 900 de cette série ont été publiés à titre de manuscrits (Série biologique) de l'Office de biologie du Canada, et après le changement de la désignation de cet organisme par décret du Parlement, en 1937, ont été classés en tant que manuscrits (Série biologique) de l'Office des recherches sur les pêcheries du Canada. Les numéros allant de 901 à 1425 ont été publiés à titre de manuscrits de l'Office des recherches sur les pêcheries du Canada. Les numéros 1426 à 1550 ont été publiés à titre de Rapport manuscrits du Service des pêches et de la mer, Ministère des Pêches et de l'Environnement. Le nom de la série a été changé à partir du rapport numéro 1551 et est maintenant Rapport manuscrit canadien des sciences halieutiques et aquatiques.

Les numéros 1459, 1510, 1526, 1528 et 1529 sont sortis trop tard pour les inclure dans les index antérieurs. Le numéro entre parenthèses, à la fin de chaque référence, indique l'établissement d'où provient la documentation du rapport. Voir aux pages 2374 and 2375 les adresses correspondant à

ces numéros. On peut se procurer des examplaires de Rapports manuscrits auprès de Micromedia Ltd., 144 Front Street West, Toronto, Ontario M5J 1G2.)

1459. Cleugh, T. R., and L. R. Russell. 1980. Radio tracking chinook salmon to determine migration delay at Whitehorse Rapids Dam. 43 p. (12)
1510. Chang-Kue, K. T. J., and R. A. Cameron. 1980. A survey of the fish resources of the Great Bear River, Northwest Territories, 1974. 59 p. (4)
1526. Brunskill, G. J., P. Campbell, and S. E. M. Elliott. 1979. Temperature, oxygen, conductance and dissolved major elements in Lake Winnipeg. 127 p. (4)
1528. Minaker, B. A., F. K. Sandercock, and L. I. Balmer. 1979. Big Qualicum River Project 1974-1975. 131 p. (12)
1529. Tutty, B. D. 1979. 1977 chinook salmon investigations associated with the McGregor River Diversion. 66 p. (12)
1533. Hourston, A. S., and J. M. Hamer. 1979. Definitions and codings of localities, sections, management units and divisions for British Columbia herring data. 79 p. (1)
1534. Haegele, C. W., and M. J. Hamey. 1979. Shoreline vegetation on herring spawning grounds in Stuart Channel, Strait of Georgia, British Columbia. 29 p. (1)
1535. Wu, R. S. S., and C. D. Levings. 1979. Physical factors implicated in reduced barnacle (*Balanus glandula*) populations at the Squamish estuary, B.C. 13 p. (3)
1536. Haegele, C. W., and M. J. Hamey. 1979. Shoreline vegetation on herring spawning grounds in Clayoquot Sound. 39 p. (1)
1537. Banford, C., and D. D. Bailey. 1979. Blaney Creek Chum Project, 1972-1977. 46 p. (12)
1538. Harrison, M. C. 1979. Resident boating in Georgia Strait, 1979 update. 119 p. (12)
1540. Brunskill, G. J., and B. W. Graham. 1979. The offshore sediments of Lake Winnipeg. 75 p. (4)
1541. Semple, J. R. 1979. Downstream migration facilities and turbine mortality evaluation, Atlantic salmon smolts at Malay Falls, Nova Scotia. 15 p. (8)
1542. Bailey, D. D. 1979. An evaluation of the Japanese-style Thornton Creek pilot chum hatchery 1976 brood. 65 p. (12)
1543. Hilland, R. T. 1979. Biological reconnaissance of chum salmon in the lower Bella Coola Valley to May, 1979. 47 p. (12)
1544. Hay, D. E., and J. L. Mitchell. 1979. Recovery of tagged fish from a roe processing plant - a pilot study. 16 p. (1)
1545. Haegele, C. W., and D. C. Miller. 1979. Assessment of 1979 herring spawnings in Chatham Sound, British Columbia. 31 p. (1)
1546. Wright, D. G. 1980. A twenty-five year scenario of anticipated developments that may have an impact on fish and fish habitat in the prairie provinces and the Northwest Territories. 31 p. (4)
1547. Haegele, C. W., and D. C. Miller. 1979. Assessment of 1979 herring spawnings in the Meares Island section of Clayoquot Sound, British Columbia. 27 p. (1)
1548. Adkins, B. E., P. A. Gee, and P. A. Breen. 1980. Experimental octopus trap fishing in Barkley Sound, February-March 1979. 23 p. (1)
1549. Haegele, C. W., and M. J. Hamey. 1980. Shoreline vegetation on herring spawning grounds in Barkley Sound in 1978 compared with similar assessments for 1974 and 1975. 37 p. (1)
1550. Hourston, A. S. 1979. Stock assessments for British Columbia herring management units in 1979 and forecasts of the available roe catch in 1980. 11 p. (1)
1551. Cook, D. G., J. M. Reinhart, and J. Watson. 1980. Guide to preparing Canadian Reports of Fisheries and Aquatic Sciences. 14 p. (10)
1552. Smith, T. G., M. O. Hammill, D. W. Doidge, T. Cartier, and G. A. Sleno. 1979. Marine mammal studies in southeastern Baffin Island. Final report to the Eastern Arctic Marine Environmental Studies (EAMES) project. 70 p. (5)

1553. Falk, M. R., and D. V. Gillman. 1980. Status of the Arctic grayling and northern pike sport fisheries in the Brabant Island - Beaver Lake area of the Mackenzie River, Northwest Territories. 38 p. (4)
1554. Hourston, A. S., and D. C. Miller. 1980. Procedures for sampling herring at the Pacific Biological Station. 23 p. (1)
1555. Bodaly, R. A., T. W. D. Johnson, and R. J. P. Fudge. 1980. Post-impoundment changes in commercial fishing patterns and catch of lake whitefish (*Coregonus clupeaformis*) in Southern Indian Lake, Manitoba. 14 p. (4)
1556. Brunskill, G. J., S. E. M. Elliott, and P. Campbell. 1980. Morphometry, hydrology, and watershed data pertinent to the limnology of Lake Winnipeg. 32 p. (4)
1557. Arctic Biological Station. 1980. A marine biological study of Brevoort Harbour and nearby waters of eastern Baffin Island. A report prepared for the Offshore Environment Division, Department of Indian Affairs and Northern Development. 208 p. (5)
1558. Hamilton, R. E. 1980. Hydrology, fisheries resource, and watershed development of Marble River, Vancouver Island, B.C. 41 p. (12)
1559. Falk, M. R., D. V. Giliman, and C. J. Read. 1980. The walleye, *Stizostedion vitreum* (Mitchill), sport fishery on Mosquito Creek, Northwest Territories, 1973-78. 29 p. (4)
1561. Smith, T. G., and M. O. Hammill. 1980. A survey of the breeding habitat of ringed seals and a study of their behavior during the spring haul-out period in southeastern Baffin Island. Addendum to the Final Report to the Eastern Arctic Marine Environmental Studies (EAMES) project. 47 p. (5)
1562. Fedorenko, A. Y., and D. D. Bailey. 1980. Inches Creek chum pilot project, 1970-1978. 47 p. (12)
1563. Westheim, S. J. 1980. The trawl fishery in the Strait of Georgia and vicinity, 1945-77. 130 p. (1)
1564. Barber, F. G. 1980. Size distribution of pink salmon. 20 p. (10)
1565. Stocker, M., J. Fargo, and D. M. A. Bennett. 1980. Dover sole tagging, Eastern Dixon Entrance, September 18-29, 1979. 50 p. (1)
1566. Jessop, B. M. 1980. Creel survey and biological study of the striped bass fishery of the Annapolis River, 1978. 20 p. (8)
1568. Wildish, D. J., A. J. Wilson, and H. M. Akagi. 1980. Sublittoral macro-infauna of Digdeguash estuary, New Brunswick, Canada. 8 p. (6)
1569. Kendaris, T. A. 1980. Physical and biological oceanographic observations in Logy Bay, Newfoundland: April - September 1979. 60 p. (9)
1570. Ketchen, K. S. 1980. Reconstruction of Pacific ocean perch (*Sebastes alutus*) stock history in Queen Charlotte Sound, 1965-76. Part I. Estimation of foreign catches, 1965-76. 46 p. (1)
1571. Levings, C. D. (comp.) 1980. An account of a Workshop on restoration of estuarine habitats. 29 p. (3)
1572. Taylor, F. H. C., and R. Kieser. 1980. Hydroacoustic and fishing surveys for walleye pollock in Dixon Entrance and nearby areas, July 5-23, 1978. 73 p. (1)
1573. Smith, T. G., and M. O. Hammill. 1980. Distribution and food habits of the birds along the southeastern Baffin Island coast. 23 p. (5)
1574. Dodimead, A. J. 1980. A general review of the oceanography of the Queen Charlotte Sound-Hecate Strait-Dixon Entrance region. 248 p. (1)
1575. Babaluk, J. A., J. S. Campbell, and K. D. Rows. 1980. Morphometry of lakes and chemical analysis of waters in the Heming Lake study area, Manitoba. 21 p. (4)
1576. Breen, P. A., and B. E. Adkins. 1980. Observations of abalone populations in Emily Carr Inlet and Lotbiniere Bay, April 1980. 17 p. (1)
1577. Smith, T. G., and M. O. Hammill. 1980. Ringed seal, *Phoca hispida*, breeding habitat survey of Bridport Inlet and adjacent coastal ice. 31 p. (5)
1579. Haegle, C. W., and M. J. Hamey. 1980. Shoreline vegetation on herring spawning grounds in Thompson Bay, British Columbia. 21 p. (1)
1580. Haegle, C. W., and M. J. Hamey. 1980. Shoreline vegetation on herring

- spawning grounds in Laredo Sound,
British Columbia. 23 p. (1)
1581. Northwest Hydraulic Consultants Ltd.
1980. Study to determine acceptable
wave climate in small craft harbours.
165 p. (10)
1583. Gray, R. W., D. L. Morantz, and J. D.
Cameron. 1980. Size, distribution
and significance of the commercial
by-catch of Atlantic salmon (*Salmo
salar* L.) in mainland Nova Scotia.
39 p. (8)
1585. Findlay, D. L., and G. Saesura. 1980.
Effects of phytoplankton biomass,
succession and composition in Lake
223 as a result of lowering pH levels
from 7.0 to 5.6. Data from 1974 to
1979. 16 p. (4)

DATA REPORTS/RAPPORTS STATISTIQUES

Abbreviation/Abréviation: D

(NOTE: These reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of Data Reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries management, technology and development, ocean sciences, and aquatic environments relevant to Canada.

Numbers 1-25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26-160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was changed with report number 161 and is now Canadian Data Report of Fisheries and Aquatic Sciences.

Data Reports are not intended for general distribution and the contents must not be referred to in other publications without prior written clearance from the issuing establishment. The correct citation appears above the abstract of each report.

Numbers 79, 80, and 140 were issued too late for listing and indexing in previous indexes. They are indexed herein. The numerals in parentheses at the end of each reference indicate the name of the establishment from which the information or the Report originated. See pages 2374 and 2375 for addresses corresponding to these numerals. Copies of Data Reports may be obtained from Micromedia Ltd., 144 Front Street West, Toronto, Ontario M5J 1G2.)

(REMARQUE: Ces rapports servent de base à la compilation des données de classement et d'archives pour lesquelles il y a peu ou point d'analyse. Cette compilation aura d'ordinaire été préparée pour appuyer d'autres publications ou rapports. Les sujets des Rapports statistiques reflètent la vaste gamme des intérêts et politiques du Ministère des Pêches et des Océans, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada.

Les numéros 1 à 25 de cette série ont été publiés à titre de Records statistiques, Service des pêches et de la mer. Les numéros 26-160 ont été publiés à titre de Rapports statistiques du Service des pêches et de la mer, Ministère des Pêches et de l'Environnement. Le nom de la série a été modifié à partir du numéro 161 et est maintenant Rapport statistique canadien des sciences halieutiques et aquatiques.

Les Rapports statistiques ne sont pas préparés pour une vaste distribution et leur contenu ne doit pas être mentionné dans une publication sans autorisation écrite préalable de l'établissement auteur. Le titre exact paraît au haut du résumé de chaque rapport.

Les numéros 79, 80 et 140 sont sortis trop tard pour les inclure dans les index antérieurs. Le numéro entre parenthèses, à la fin de chaque référence, indique l'établissement d'où provient la documentation du rapport. Voir aux pages 2374 et 2375 les adresses correspondant à ces numéros. On peut se procurer des exemplaires de Rapports statistiques auprès de Micromedia Ltd., 144 Front Street West, Toronto, Ontario M5J 1G2.)

79. Marshall, D. E., and C. I. Manzon. 1980.
Catalogue of salmon streams and
spawning escapements of Prince George
Subdistrict. 252 p. (12)
80. Brown, R. F., M. J. Comfort, and D. E.
Marshall. 1979. Catalogue of salmon
streams and spawning escapements of
Statistical Area 24 (Clayoquot Sound).
135 p. (12)

140. Brown, R. F., E. W. Britton, C. I. Manzon, and D. E. Marshall. 1979. Catalogue of salmon streams and spawning escapements of Statistical Area 27 (Cape Cook to Cape Scott). 250 p. (12)
160. Dodimead, A., A. Ballantyne, and M. Douglas. 1979. Oceanographic observations during fisheries research surveys off the British Columbia coast in 1978. 136 p. (1)
161. Brown, R. F., M. M. Musgrave, and D. E. Marshall. 1979. Catalogue of salmon streams and spawning escapements of Pemberton - Lillooet Sub-District. 88 p. (12)
162. Beamish, R. J., C. Houle, C. Wood, and R. Scarsbrook. 1979. A summary of sablefish tagging and exploratory trapping studies conducted during 1978 by the Pacific Biological Station. 113 p. (1)
163. Cameron, J. D., and R. W. Gray. 1979. Estimated densities of juvenile Atlantic salmon and other freshwater fishes in selected Nova Scotia streams. 1978. 43 p. (8)
164. Wacasey, J. W., E. G. Atkinson, and L. Glasspoole. 1979. Zoobenthos data from upper Frobisher Bay, 1967-1973. 99 p. (5)
165. Pickard, P. R., and J. L. Peppar. 1979. Ages at migration of Atlantic salmon in the Restigouche River, 1976-78. 5 p. (8)
166. Pickard, P. R., and J. L. Peppar. 1979. Densities of freshwater fishes (non-Atlantic salmon), Restigouche River system, New Brunswick, 1972-78. 21 p. (8)
167. Brown, R. F., M. M. Musgrave, D. G. Demontier, D. E. Marshall, and M. J. Comfort. 1979. Catalogue of salmon streams and spawning escapements of Statistical Areas 22 and 23 (Nitinat and Barkley Sound). 191 p. (12)
168. Schmidt, R. V., M. C. Healey, F. P. Jordan, and R. M. Hungar. 1979. Data Record: Juvenile salmon and other fish species captured by 50-fathom purse seines in nearshore areas near Nanaimo, 1976. 83 p. (1)
169. Bilton, H. T., R. M. Humphreys, D. W. Jenkinson, and G. Johnston. 1979. Data on rearing, tagging, and release of accelerated and normally reared coho salmon from Rosewall Creek, 1974. 17 p. (1)
170. Schofield, E. J., and J. O. Peppar. 1979. Densities of freshwater fishes (non-Atlantic salmon), Miramichi River system, New Brunswick, 1970-78. 43 p. (8)
171. Smith, K. E. H. 1979. Capture and distribution of all fish species at Saint John River power dams, New Brunswick, from construction years to 1971. 55 p. (8)
172. Greer, G. L., P. G. Futer, and I. G. Shand. 1979. Selected physical and chemical oceanographic data from Quatsino Sound-Neroutsos Inlet, March 1979 survey. 28 p. (3)
173. Thompson, J. M., and R. J. Beamish. 1979. An examination of the biology and distribution of walleye pollock in Dixon Entrance, Hecate Strait, the mainland inlets off Queen Charlotte Sound, and in the Strait of Georgia during March 14-April 21, 1978. 188 p. (1)
175. Moshenko, R. W. 1980. Biological data on the major fish species from fifty-nine inland lakes in the Northwest Territories, 1959-68. 81 p. (4)
176. Schmidt, R. V., M. C. Healey, F. P. Jordan, and R. M. Hungar. 1979. Data Record: Juvenile salmon and other fish species captured by 120-fathom purse seines in nearshore areas near Nanaimo, 1976-1977. 139 p. (1)
177. Chilton, D. E., M. Stocker, and J. Fargo. 1979. Length and age composition of rock sole (*Lepidopsetta bilineata*) from commercial landings from the Butterworth-Warrior area of Hecate Strait, 1973-78. 17 p. (1)
178. Francis, A. A. 1980. Densities of juvenile Atlantic salmon and other species, and related data from electroseining studies in the Saint John River system, 1968-78. 95 p. (8)
179. Westrheim, S. J., R. P. Foucher, W. R. Harling, and W. Shaw. 1980. G. B. Reed groundfish cruise no. 79-4, June 26-July 13, 1979. 73 p. (1)
180. Foucher, R. P., W. R. Harling, R. M. Wallis, W. Shaw, and K. R. James. 1980. Pacific cod tagging and stock monitoring off southwest Vancouver Island, February-March 1979. (*Pacific Eagle* groundfish cruises 79-1 and 79-2). 79 p. (1)
181. Ingram, J. H. 1980. Capture and distribution of Atlantic salmon and

- other species at Mactaquac Dam and Hatchery, Saint John River, N.B., 1972-76. 65 p. (8)
182. Chang, P. S. S., D. F. Malley, W. J. Findlay, G. Mueller, and R. T. Barnes. 1980. Species composition and seasonal abundance of zooplankton in Lake 227, Experimental Lakes Area, northwestern Ontario, 1969-1978. 101 p. (4)
 183. Marshall, D. E., M. J. Comfort, and E. W. Britton. 1980. Catalogue of salmon streams and spawning escapements of Statistical Area 26 (Kyuquot Sound). 95 p. (12)
 184. Kristofferson, A. H., and G. W. Carder. 1980. Data from the commercial fishery for Arctic char, *Salvelinus alpinus* (Linnaeus), in the Cambridge Bay area, Northwest Territories, 1971-78. 25 p. (4)
 185. Ketchen, K. S. (ed.) 1980. Assessment of groundfish stocks off the west coast of Canada (1979). 213 p. (1)
 186. Falk, M. R., D. V. Gillman, and C. J. Read. 1980. Data on the walleye, *Stizostedion vitreum* (Mitchill), and other fish species from Mosquito Creek, Northwest Territories, 1973-78. 44 p. (4)
 187. Barner, L. W., F. H. C. Taylor, D. M. A. Benne'tt, and J. Cave. 1980. Midwater and bottom trawl tows and catches made on M/V Arctic Harvester cruise, AH79-1, January 22-February 9, 1979 in Dixon Entrance. 146 p. (1)
 188. Moshenko, R. W., and G. Low. 1980. The walleye sport fishery on the Hay River, Northwest Territories, 1978. 12 p. (4)
 189. Shearer, J. A., and D. R. DeClercq. 1980. Light extinction in the Experimental Lakes Area - 1979 data. 63 p. (4)
 190. Bennett, D. M. A., and M. Stocker. 1980. Length and age composition of English sole (*Parophrys vetulus*) in commercial landings from north Hecate Strait, British Columbia, 1973-1979. 22 p. (1)
 191. Westrheim, S. J., R. P. Foucher, W. R. Harling, and W. Shaw. 1980. G. B. Reed groundfish cruise no. 79-6, September 6-21, 1979. 64 p. (1)
 192. Beanlands, D. I. 1980. Surveys of ten lakes in Guysborough, Halifax, Hants and Lunenburg counties, Nova Scotia, 1978. 31 p. (8)
 193. McCarter, P. B. 1980. Exploratory fishing by the automated longliner M/V Viking Star off the west coast of the Queen Charlotte Islands, September, 1979. 45 p. (1)
 194. Moshenko, R. W., and G. Low. 1980. Data from the commercial fishery for lake whitefish, *Coregonus clupeaformis* (Mitchill), on Great Slave Lake, Northwest Territories, 1979. 29 p. (4)
 195. McGregor, G. W. G. 1980. Summary of mercury levels in lakes on the Churchill-Rat-Burntwood and Nelson river systems from 1970 to 1979. 16 p. (4)
 198. Percy, J. A., and F. J. Fife. 1980. Distribution, population structure and reproduction of arctic marine isopods of the *Mesidotea* complex in the southern Beaufort Sea. 91 p. (5)
 199. Falk, M. R., G. Low, D. V. Gillman, and G. W. Carder. 1980. Data from the Arctic grayling sport fishery on the Kakisa River, Northwest Territories, 1979. 13 p. (4)
 200. DeClercq, D. R., and J. A. Shearer. 1980. Phytoplankton primary production, chlorophyll, and suspended carbon in the Experimental Lakes Area - 1979 data. 46 p. (4)
 201. Bodaly, R. A., R. N. Erickson, and R. J. P. Fudge. 1980. Pre- and post-impoundment experimental fish catches, Southern Indian Lake, Manitoba, 1972-1979. 73 p. (4)
 202. Gray, R. W., and J. D. Cameron. 1980. Juvenile Atlantic salmon stocking in several Nova Scotia and southern New Brunswick salmon streams, 1971-79. 47 p. (8)
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Abbreviation/Abréviation: I

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Industry Reports may be cited as full publications. The correct citation appears above the abstract of each report. Each report will be abstracted in *Aquatic Sciences and Fisheries Abstracts* and will be indexed annually in the Department's index to scientific and technical publications.

Numbers 1-91 in this series were issued as Project Reports of the Industrial Development Branch, Technical Reports of the Industrial Development Branch, and Technical Reports of the Fisherman's Service Branch. Numbers 92-110 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Industry Reports. The current series name was changed with report number 111 and is now Canadian Industry Report of Fisheries and Aquatic Sciences.

The numerals in parentheses at the end of each reference indicate the name of the establishment from which the information or the Report originated. See pages 2374 and 2375 for addresses corresponding to these numerals. Copies of Industry Reports may be obtained from Micromedia Ltd., 144 Front Street West, Toronto, Ontario M5J 1G2.)

(REMARQUE: Ces rapports contiennent les résultats des recherches et des progrès qui peuvent être utiles à l'industrie pour des applications soit immédiates, soit futures. Ils sont préparés à l'intention principalement des membres des secteurs primaire et secondaire de l'industrie des pêches

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et de la mer. Il n'y a aucune restriction quant au sujet; de fait, la série reflète la vaste gamme des intérêts et des politiques du Ministère des Pêches et des Océans, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada.

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Abbreviation/Abréviation: S

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(REMARQUE: Jusqu'en 1970, ces articles ont été réimprimés dans un volume annuel intitulé *Studies* composé de deux parties. La dernière parution a été dans *Studies* 1969, partie 2, qui comprenait le

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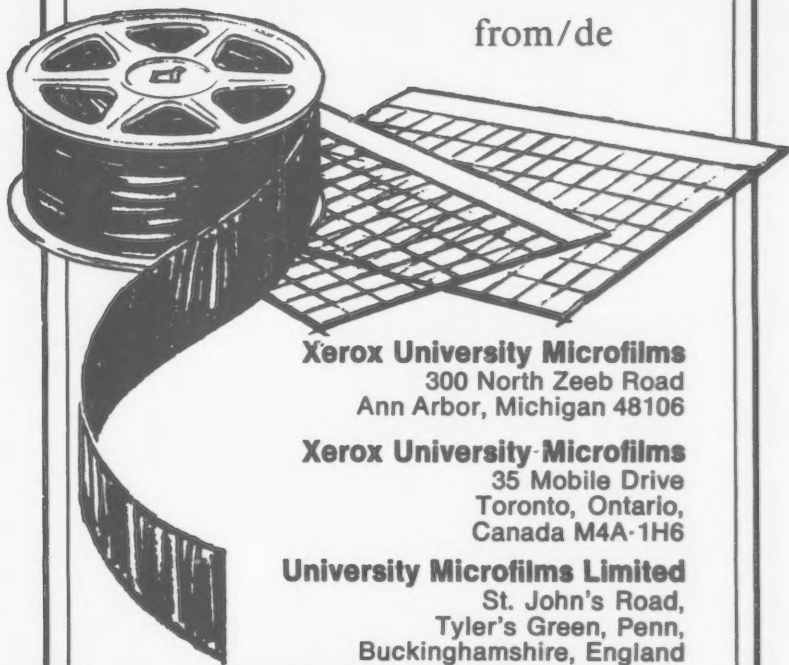
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